

#### New Social and Economic Books.

Maternity. Letters from Working Women Collected by the Women's Co-operative Guild. With a Preface by the Right Hon. HERBERT SAMUEL. Second Edition.

Domestic Service. Being the Result of an Inquiry by the Women's Industrial Council. Edited by Misset. V. BUTLER. With an Additional Chapter by Lady WILLOUGHBY DE BROKE. Crown 8vo, 1s. 3d. net.

Downward Paths. An Inquiry into the Causes which contribute to the making of the Prodititute. With a Foreword by A. MAUDE ROYDEN. Crown 8vo, 2s. 6d. net.

Women in Modern Industry. By B. L. HUTCHINS. With a Chapter on the 1916 Wage Census by J. J. MALLON. 4s. 6d. net.

Married Women's Work. Being the Report of an Inquiry undertaken by the Women's Industrial Council. Edited by CLEMBNITNA BLACK. 2s. 6d. net.

The Nation of the Future. A Survey of Hygienic Conditions and Possibilities in School and Home Life. By L. HADEN GUEST, M.R.C.S. (Eng.), L.R.C.P. (Lond)., School Medical Officer, London County Council. Illus-

Round about a Pound a Week. By Mrs.

Physical Regress. Second Edition. 2s. 6d, net.

The Hope for Society, and Other Essays on Social Reconstruction after the War. By the Lord Bishop of Oxford, Mr. J. A. Hobson, Mr. Clutton Brock, Sir Hugh Bell, Mr. Christopher Turnor, Mr. C. R. BUXTON, Miss Margaret Bondrield, Mrs. Pethick Lawrence, and others. Crown 8vo, 3s. net.

G. BELL AND SONS LTD.,
YORK HOUSE, PORTUGAL, STREET, LONDON, W.C.

### STUDIES IN ECONOMICS AND POLITICAL SCIENCE Edited by Hon. Pember Reeves

Director of the London School of Economics and Political Science No. 49 in the Series of Monographs by Writers connected with the London School of Economics and Political Science

#### WELFARE WORK

## WELFARE WORK

## EMPLOYERS' EXPERIMENTS FOR IMPROVING WORKING CONDITIONS IN FACTORIES

#### E. •DOROTHEA PROUD

(Mrs. GORDON PAVY)

B.A., ADELAIDE; D.Sc. (ECON.), LONDON; C.B.E.

WITH A FOREWORD BY

DAVID LLOYD-GEORGE, P.C., M.P.

PRIME MINISTER

(FIRST MINISTER OF MUNITIONS)



THIRD EDITION

G. BELL AND SONS LTD.

331.827 P 947

First Edition, [whished July 1916 Second Edition . . . October 1916 Third Edition . . . . May 1918

#### то

# THE PEOPLE OF SOUTH AUSTRALIA IN MEMORY OF CATHERINE HELEN SPENCE

#### **FQREWORD**

By DAVID LLOYD-GEORGE, P.C., M.P. HIS MAJESTY'S SECRETARY OF STATE FOR WAR

Among all the changes which the great war has brought in its train, none is more significant, and none more likely to have lasting effect than the revolution in the structure of British industry. For the first time in our history many firms have submitted to a general control by the State; many workers have desisted from the endeavour to regulate the supply and restrict the output of labour. The factories are alive with new workers; the State assumes new responsibilities; fresh needs and opportunities arise; industrial conditions are in solution.

In no respect has the change in our factories been more marked than in the character of the labour employed. Men of all descriptions, drawn from every walk in life, half-skilled and unskilled, have poured into munition works. Even more remarkable has been the advent of the women. From the shop, from the work-room, from domestic service—many of them utterly unaccustomed to factory or even manual work—they have come in their thousands and hundreds of thousands. There has been no readier patriotism. And these women, these young girls, submit cheerfully to long hours, to hard work, to monotonous work, so that they may "beat the Germans." Many of the firm, that engage them

have never employed women before; many, that employed tens, now employ hundreds or thousands. The change has been sudden. When last summer the demand arose for shells, and still more shells, to save the liberties of Europe, and from one end of the country to the other engineering and other shops and factories were converted to the making of munitions, the response of the women and of other workers was overwhelming. Before the problems of the change could be solved, the new hands were already at work at the machines.

.The conditions of their work soon engaged my attention. If a maximum output was to be reached—still more, if it was to be maintained for a protracted period—it was all-important that the health and well-being of the workers should be carefully safeguarded. This was specially the case with women and young people. The workers of to-day are the mothers of to-morrow. In a war of workshops the women of Britain were needed to save Britain; it was for Britain to protect them. Steps were taken immediately to improve the conditions under which both men and women were working.

A strong Departmental Committee was appointed to consider the question of the Health of Munition Workers under the chairmanship of that eminent civil servant, Sir George Newman. It has issued a valuable series of reports on hours of labour, industrial fatigue, canteens, the employment of women, welfare supervision, and the like. Further reports are to follow. A Canteen Committee was set up by the Central Control Board (Liquor Traffic) to assist firms in the construction of canteens and to afford financial assistance in conjunction with the Ministry

of Munitions. A Committee was formed, in association with the Home Office, to secure a weekly rest to the workers and to regulate the hours of their labour. These have been greatly reduced, especially in the case of women. At the Ministry itself a new Department was created, charged with the general responsibility of securing a high standard of conditions for all workers in munition factories. At my request Mr. B. S. Rowntree accepted its direction. No man could have been found better qualified by sympathy and experience for the task.

. It would be impossible to exaggerate the importance of the work which this Department has undertaken. Elaborate inquiries are being made into the conditions under which women and young persons are working; and wherever necessary, immediate steps are being taken to set them right. Employers are being afforded reasonable financial encouragement to provide proper accommodation; not only canteens, but cloak-rooms, rest-rooms, lavatories, are being built. Steps are being taken to turn to account a sum generously placed at the disposal of the Ministry of Munitions by an Indian Prince, the Maharajah Scindia of Gwalior, by using it to enable men and women workers to obtain the healthful and invigorating recreation they so sorely need. Even more important provision is being made to secure adequate supervision, in the factories themselves, of the conditions under which women and young persons are working.

Welfare Supervision is no new thing, either in this country, in the Dominions, or in America. Beginning with a view mainly to the well-being of the employed, it gradually became evident that Welfare Supervision was equally beneficial to the employer, particularly

in works employing women. If chosen with due regard to personality, experience, and character, it was found that a Lady Welfare Supervisor could relieve the management of a mass of minor but important detail. She heard complaints and investigated dismissals. She supervised the canteen and other accommodation. She helped to engage new labour. The character and tone of the works depended largely upon her. The foreman referred to her in matters of discipline, slack work, or bad timekeeping. The workers brought their troubles to her. The management found that her presence conduced to smooth working and increased output. She became not only the friend of the workers, but an essential part of the business organisation. Employers and workers alike wondered how they had done without her.

This admirable system is being introduced into the munition factories. Appointments are being made in all National factories in which women are employed. Many Controlled Establishments have followed suit. It is my desire that the remainder should fall into line, regard being had to the size and circumstances of each factory. I cannot insist too strongly on the importance of the movement. It helps to secure a larger and speedier output of munitions; it preserves the health and the happiness of the workers; it relieves the harassed employer of needless strain. The system is equally applicable to the many factories engaged in production for the export and other traces, in which women are taking the place of men who have joined the colours.

It is a strange irony, but no small compensation, that the making of weapons of destruction should afford the occasion to humanise industry. Yet such is the case. Old prejudices have vanished, new ideas are abroad; employers and workers, the public and the State, are all favourable to new methods. The opportunity must not be allowed to slip. It may well be that, when the tumult of war is a distant echo, and the making of munitions a nightmare of the past, the effect now being made to soften asperities, to secure the welfare of the workers, and to build a bridge of sympathy and understanding between employer and employed, will have left behind results of permanent and enduring value, to the workers, to the nation, and to mankind at large.

This volume will be found very helpful to those who desire to do their part in the good work now. We owe it to the good sense, industry, and intelligence of an Australian, Miss E. D. Proud, who, after graduating at the University of Adelaide, has spent many years of patient inquiry and research into the conditions of welfare work as carried on in the factories of the Commonwealth and of Great Britain. She has further served in the Welfare Department at the Ministry of Munitions since its foundation. Her knowledge of Welfare Work is therefore unique, and her book bids fair to become the standard work on the subject. I warmly commend it to employers, to Lady Superintendents, and to all those members of the general public who care for the welfare of the workers in our factories.

1 Tall Tools

June 1016.

#### AUTHOR'S PREFACE

Hundreds of visits to factories in Australia, New Zealand, England, and Scotland, as well as a little actual factory work, have provided material for this thesis, which was written primarily for the people of South Australia, who sent me to England as Spence Scholar in Sociology, leaving me free to select any branch of that science. My reason for choosing to study Welfare Work was that I had seen beneficial results from one or two attempts in this direction in Australia, and desired to find out what was being done in England and with what results. "Charity" is not tolerable to Australians, nor does "Efficiency" hold them with a magic spell. If one or other of these were its sole basis, Welfare Work would have a short shrift in Australia. But nothing appeals more strongly to the Australian people than a high standard of living, and a general improvement in factory conditions cannot but help in the desired direction.

Factory conditions in Australia differ from those in England, it seems to me, in that they are more nearly even; there are not the same extremes of excellence and evil which are to be found in England. Factory laws in Australia also differ from those in

England. But Australians are very ready to respond to what seems to be the keynote in English Welfare Work, namely, the recognition of individuality and individual responsibility. It is for that reason that I hope this book may prove of service to those who sent me to this country.

I speak of England rather than of Great Britain or the United Kingdom; for, though I have visited Scotland several times, I learnt much less of Welfare Work there than in England, and I have not visited Ireland at all, though there are one or two conspicuous examples of Welfare Work in that country.

I have as far as possible avoided naming employers, though I have necessarily made one or two exceptions in order to emphasise particular points.

I have not touched upon the work of the newly formed Welfare Department of the Ministry of Munitions, for my thesis was completed before that Department began its work. It is interesting to note, however, that here we have the largest employer in the land—the Ministry—recognising its responsibility for the Welfare of its workers. The number of Welfare Workers in this country is increasing every week; special courses of instruction and training in Welfare Work are now in progress at several of the Universities, and a new profession is growing rapidly into prominence. Rapid growth is not without its dangers, but this is no time for shrinking from danger in the path of progress. I shall be glad if this book serves in any way to help those who in these troublous times are attempting the untried.

My thanks are due to many for assistance in gathering and arranging material for this thesis. Those to whom I owe most prefer to remain anonymous; for this reason I name no one, but my appreciation and gratitude are not the less sincere.

E. DOROTHEA PROUD.

London School of Economics, 1916.

#### CONTENTS

•		
FOREWORD BY DAWD LLOYD-GEORGE, P.C., M.P. HIS MAJESTY'S SECRETARY OF STATE FOR WAR	,	ix
•Author's Preface		xv
PART I		
Introduction	•	I
I. THE SOCIAL FUNCTION OF THE EMPLOYER IN A CAPITALISTIC STATE		9
II. Employers' Influence on Factory Legislation		17
1. Public Work	•	17
2. From within their own Factories	•	23
III. Change in the Nature of Industrial Legisla tion; its Relation to Employers' Experi		
MENTS	•	31
IV. CHANGE IN THE EMPLOYERS' ATTITUDE TOWARD FACTORY LEGISLATION	S	42
V. WELFARE WORK AND THE IDEALS OF THE WORKERS	•	42
	•	52
VI. THE WELFARE DEPARTMENT	•	59
PART II		(
Introduction		71
I. THE RELATION OF WORK TO WORKERS; NATIONA	L	
VERSUS INDIVIDUAL POINTS OF VIEW .		76
II. THE INDUSTRIAL ENVIRONMENT		96
I. General		96
2. Lavatories and Cloak-Rooms		114
3. Mess-Rooms		119
4. Rest-Rooms, etc.	•	127
JII. WAGES AND HOURS		135
IV. INCIDENTAL AIDS TO WELFARE  1. Physical Well-being—	•	170
(a) Health		170
(b) Recreation		177
(c) Food		188
(d) Baths and Gymnasia		200
(e) Housing		207
(e) Housing 2. Mental Development		214
3. Personal Dignity	•	242
V. THE SCOPE OF THE WELFARE DEPARTMENT .	•	251

	EN		

CHAP.	· ·	PAGE
	Employers' Influence on Early Factory Legislation (The Ten Hours Act)	273
II.	EMPLOYERS' EXPERIMENTS IN REDUCTION OF HOURS	282
III.	EXTRACTS FROM INSPECTORS' REPORTS RE EMPLOYERS' INTEREST IN THE WELFARE OF THEIR	
	Workpeople	288
IV.	"Good Employers"	297
V.	DESCRIPTION OF WORK UNDERTAKEN BY ONE COM- PANY, PRIOR TO 1852, FOR THE BENEFIT OF THEIR WORKPEOPLE: THE APPOINTMENT OF A FACTORY CHAPLAIN (from the Quarterly Review, Article I., Dec. 1852)	301
VI.	THE DEVELOPMENT OF A WELFARE DEPARTMENT .	313
	EXTRACTS FROM THE DIRECTORY OF THE WELFARE DEPARTMENT OF A MODERN FACTORY	319
VIII.	A Few Specimens of Printed Forms in Use in Various Welfare Departments	322
IX.	FACTORY DINING-ROOMS	332
	where the greatest variety is achieved (b) Four of the most noteworthy summer menus	332
	from the same dining-room.  2. Card (reduced in size) and week's menu from a	334
	northern factory dining-room	335
	3. Fluctuations in the number of dishes supplied.	338
	THE TREATMENT OF MINOR INJURIES (August 1915)	34 I
XI.	Non-Parliamentary Industrial Legislation .	344
XII.	POTTERY REGULATION 27	350
XIII.	Parasitic Trades	352
	INDEX	357

#### WELFARE WORK

#### PART I

#### INTRODUCTION

Many are the methods adopted or advocated for The name, improving the position of the manual worker in our Westare Work," is social organisation. No name has yet established not yet for itself an exclusive right to designate all the generally "'common schemes' through which the whole body of employees" is "given the use of institutions or opportunities of a social or educational kind."1 An economist 2 speaks of "Social Betterment" or "" Model Employment," while an employer and a factory inspector use the name "Welfare Work" without compunction or inverted commas.3 Modern English factory inspectors blazon forth the word "Welfare" in all the splendour of an initial capital, and employers make title pages of the phrase "Welfare Work," 4 while scientific writers, both in England and in America, still cling to the protection of a quotation.5

<sup>1</sup> D. H. McGregor, The Evolution of Industry, 1911, p. 140.

<sup>2</sup> Ilid., p. 141. <sup>3</sup> Vide Experiments in Industrial Organisation, 1912, p. 262, and Miss Hilda Martindale, Paper on Hygiene and Industrial

Employment 1911. \* Vide B.M. 011850. e. 16, The Evolution of Journalism, 1909,

p. 311.

6" 'Welfare' programmes" (W. J. Ashley, Economic Organisation, 1914, p. 180). "This class of work is called welfare" (Brisco, Economics of Efficiency, 1914, p. 241). "'Welfare' provisions have been found useful in keeping up the operator's efficiency" (J. C. Goldmark, Fatigue and Efficiency 1912, 1913). "Among the proposed remedial devices." Efficiency, 1912, p. 45). "Among the proposed remedial devices

"Social," "Welfare," and "Employment" Departments in modern factories frequently have similar functions; and in some cases there is no special department, the work being undifferentiated and carried out, more or less efficiently, in all departments.1

Before Welfare Work was recognised in theory,

or specialisation in practice made the adoption of a name necessary,

It has been asserted that, "in this country especially, profit-sharing has received much more attention from the theoretical economist than from the practical man." 2 The opposite would appear to be the case with regard to Welfare Work. It has been continually progressing in practice, but has been nameless and to a great extent unobserved. "Plans for the Welfare of the Workpeople," wrote Horner in 1845; half a century earlier Dale was carrying out his plans for the welfare of the workers at New Lanark. Welfare Work has, however, followed the general tendency of modern times, and become specialised; and with specialisation came the need for a name. What was, a century ago, one of the many duties of the employer himself, namely, care for his workpeople, is now delegated to an individual' or to a department. The more or less uncertain and spasmodic voluntary efforts of the employer, of the various members of his family, and of his staff in general, have been replaced by the definite, coare . . . welfare arrangements," and "What are called 'welfare' arrangements play a considerable part in the large-scale industries of our day" (F. W. Taussig, Principles of Economics,

1915, p. 303).

1 "It will have been noted that there is no mention of welfare work as such, or of social secretaries, yet it may be claimed that the organisation of the Firm embodies the principles that must be at the root of all successful welfare • vork" (Experiments in

Industrial Organisation, 1912, p. 262).

\* J. S. Nicholson, Strikes and Social Problems, 1896, p. 49. Reports from Commissioners, vol. xx., 1846, p. 573. It is interesting to note that Horner said, "The only distinction I have among my colleagues is this, . . . when we sign our names collectively, mine has always stood alphabetically first" (Reports, vol. xviii. \$1856, p. 217). This explains to a great extent the overwhelming importance given to Horner. His colleagues undoubtedly deserve more attention than they customarily receive.

ordinated actions of experts, or, rather, subjected to the considered control of men and women paid to devote the whole of their time and energy to the it existed

theory and practice of Welfare Work.

The most extravagant projects of the most progressive employers of to-day have their prototypes in many in some of the earliest mills. Doctors and school-various masters have from the time of the Industrial Revolution been associated with factories; works' diningrooms, doubtless primitive and unlovely, were in existence in the middle of the eighteenth century; baths in mills were deemed expedient a century ago or more; recreation clubs antedate all factory logislation; and old age pensions and sick insurance have superseded the charitable doles of employers prompted, by kindness of heart or pressure of public opinion, to provide, more or less adequately, for those whose lives or strength had been spent in their service. Even the special Welfare Secretary in a modern factory is foreshadowed as early as 1851 by \*the appointment of a factory chaplain, "one who could give up his whole time and care" to the "originating and superintending of the educational arrangements," so that the others in their "several positions in the factory should only have to back him up and assist him." Indeed, it might almost be said that there is nothing new in Welfare Work except the name.

In some factories where the welfare of workers There is no is very carefully considered, all names in connection essential with schemes for promoting it have been studiously between avoided, for no name is free from displeasing associa-adopting the name and tions; and it has sometimes happened that firms performing which have talked loudly about "Welfare" have the work. been utterly regardless of the true interests of their workers.2 It will be remembered that Owen, whose

<sup>&</sup>lt;sup>1</sup> Quarterly Review, Article I., Dec. 1852 (vide Appendix V). | For examples, vide Appendix IV.

zeal in this regard can scarcely be called in question, boasted that one result of the excellent conditions at New Lanark was that workers were obtained at lower wages. To-day such a boast would rouse the indignation of the workers beyond restraint, but the fear of the policy it suggested haunts the minds of many. Workers hesitate to accept good gifts from employers, lest what is given with one hand be snatched away with the other. Inspectors fear to praise improvements, lest they be expected to condone deficiencies in other respects. Even by employers this danger is sometimes realised so acutely that they dare not attempt all they feel capable of doing for their employees. But this difficulty is not one of nomenclature; Welfare Work, by whatever name it is known, must be judged according to its merits or demerits. Moreover, the use of the name does not imply that the work done is actually productive of welfare, nor indeed that it is undertaken by one who knows in what true welfare consists. It is merely a name given to a certain section of the specialised work in connection with a modern factory, whose limits we shall presently define before examining it in detail. Meanwhile, we may decide to adopt the name Welfare Work, for (1) the use of the term has extended with the growth of the work it describes, especially among those engaged in that work; (2) it appears to be the term most generally used by those whom it immediately concerns; and (3) "Welfare" is preferable to "Social" or even "Employment," as the distinctive appellation of a department which combines activities dealing with social intercourse with those concerned with employment, and which seeks so to combine them as to promote the welfare of all concerned. The fact that the word is vague, and must continue vague as long as ideals are progressive, cannot be urged against it in the name of a department whose functions develop gradually with

On the whole, "Welfare Work" seems to be the best name,

for several reasons.

the gradual development of the idea of "Welfare." If, however, we formally adopt the name Welfare Work to describe a more or less conscious movement in the industrial world, we must define it a little more strictly.

Definition .- WELFARE WORK consists of volun- The Detary efforts on the part of employers to improve, finition within the existing industrial system, the con-•ditions of employment in their own factories.

This definition does not admit operations or excludes efforts which involve any fundamental change in the attempts to existing system of industry, although it does not established imply that Welfare Work could only be carried on social order under the present industrial system, or that the system isself is necessary or permanent. It is simply a necessarv limitation of the immediate scope of that work. Profit-sharing and co-partnership, in so far as they are modifications of the capitalistic system, are excluded by the definition. "Prosperity-sharing" (a name used by one employer for his own attempts in this direction) is included only in so far as its efforts are applied, not to profit-sharing, but to what Mr. D. H. McGregor calls "common schemes" through which conditions are in any way altered to the benefit of the workers.1 It is important to notice that the definition does not

(I) limit the notion of "employer";

(2) postulate the nature of the motives for which the work is undertaken; or

(3) stipulate that efforts which are not actually productive of the employees' welfare shall be excluded.

(1) The "employer" may be an individual, a but neither firm, a company, a co-operative society, a munici- limits the notion of

"This method," says Mr. D. H. McGregor, "possesses many "employer," advantages over the more individualised systems of profitsharing. There is an advantage from the point of view of mere economy, since a share in a common good of this kind is usually of greater value to the individual workman than the payment to himself of a proportionate amount of its cost. . . . And there is also some advantage from the point of view of the democratic spirit" (The Evolution of Industry, 1911, p. 141).

pality, or a state. Each of these may stand in the relation of employer to individual workers, and it is that primary connection, whatever its modifications, which concerns us here.

nor postulates the nature of his motives,

(2) The work may be undertaken from disinterested motives or solely in the expectation of its indirect returns; most frequently, perhaps, the motives will be mixed.

nor his success.

.

By enforcing minimum requirements, legislation sets the standard

- (3) To assume that such work will always be successful in promoting the welfare of employees is impossible unless we assume almost superhuman knowledge and power on the part of the employer. The idea of welfare is vague and subjective, varying from age to age, from individual to individual. It is "a matter of opinion." Certainly, legislation provides what we may call a minimum objective standard,1 but efforts must be measured by their advance on it, not by their approach towards it. The standard as set forth in factory legislation 2 has, with perhaps only one definite break,3 marked a gradual rise in the current idea of conditions which can be tolerated. All variations beyond the accepted standard are experimental; their value may, to some extent, be estimated by subsequent movements of the law, but the motives which prompted them admit of no such gauge. Where individual efforts have advanced beyond the existing law there is no
- ¹ Mediæval statutes enforced a maximum standard; it was illegal to offer or accept better conditions. Modern statutes enforce a minimum; the employer may offer conditions as much better as he pleases, and the worker may accept the best he can obtain. Trade Union regulations or demands might be considered to establish a possible standard, but these are (1) ex parte. (2) variable, and (3) not easy of access. It might be possible to use the "Common Rule" in both its forms (vide Mrs. Sidney Webb, Socialism and National Minimum, 1907, p. 44), but the "Common Rule" as expressed in the law of the land is the most accessible, the most definite, and therefore the most satisfactory, standard.

<sup>a</sup> Since 1802.

<sup>3</sup> The Act of 1856, which reduced the compulsory guards for machinery

bjective standard, and estimation of their value ecomes again a matter of opinion. The opinions of medical experts, of Trade Unionists, and of the public may serve to indicate the trend of the ideal, out these opinions are often conflicting, and time adopted for lone can determine the true value of any individual lack of a better one; xperiment. The law itself, as it stands at any noment, affords no absolute guarantee with regard o future developments; an exaggeration of one of ts provisions without due regard to the rest may have vil results.1 The question of balance between one good and another is in fact dependent for its answer ipon empirical attempts at a solution of the problems nvolved.

A further drawback to the use of factory legisla- for factory ion as a standard for Welfare Work is that the two legislation and Welfare ire not independent of each other. Parliament has Work are repeatedly turned to employers for guidance in its mutually de ittempts to set up standards; the law proceeds along paths already marked out by individuals. In llustration of this method of procedure the following as experinstances (both from the same page of an inspector's ments of included report in 1844) may be cited, one positive, the other guide the negative. With regard to wet-spinning, the in-course of legislation, spector (Mr. R. J. Saunders) says, "The evil is, however, so serious to the workpeople, and the practicability of removing it so well established, that I trust the legislature may be induced to sanction a general provision, requiring some protection to be applied to all wet-spinning mills." He proceeds, "The dusty operation of heckling or dressing of tow and flax is perhaps a worse evil than that of wet-spinning; but I have not recommended any provision for this,

<sup>1</sup> For example, increasing the number of cubic feet of space per person without making extra provision for ventilation was in many cases found to result in the presence of a higher proportion of carbonic acid gas, which is considered an indication of a less healthy atmosphere (vide Report of Departmental Committee on Ventilation, 1902).

because no sufficient remedy has yet been discovered by any mill occupier. It must, I fear, remain to be treated under the general head of ventilation, when experience shall point out some practical means of

remedying that and many other evils." 1

and legislation

Welfare Work has in fact dragged the law after it, and the law still lumbers in its wake. The progress has not been regular or systematic, but the tendency is distinct. It would be a sorry thing if all the extravagances and the idiosyncrasies of good employers were reflected in the law—if Owen's "silent monitors," for example, were made compulsory, or employers were forced to award prizes for games. The law, as it were, smooths out the curve of practices. while following its course.

influences the progress of Welfare Work.

Industrial Law is enforced Welfare Work.

It may here be noted that, as the law advances, it encroaches upon the sphere of Welfare Work. For an employer to demand only eleven hours' work a day, for example, was once a great concession to humanity; to demand so much is now, in many instances, forbidden by law. "Much of what is now called 'Social Betterment' or 'Model Employment," says Mr. D. H. McGregor, "implies rather the removal of unfavourable conditions than the gift of specially favourable conditions. The mere fact that such schemes attracted great public attention in the beginning of the twentieth century is a serious reflection upon existing standards, and is to be read in the light of the criticism of fifty years hence no less than in the spirit of sympathy with its purposes at present." 2

Bearing in mind the relation of Welfare Work to law, and remembering that Welfare Work existed before it was so named, let us consider the part played by employers in improving working conditions

since the time of the Industrial Revolution.

<sup>&</sup>lt;sup>1</sup> Reports from Commissioners, vol. xxviii., 1844, p. 558. D. H. McGregor, The Evolution of Industry, 1911, p. 143.

#### CHAPTER I

## THE SOCIAL FUNCTION OF THE EMPLOYER 1 IN A CAPITALISTIC STATE

In England some legislative enactments are unpre-English meditated; they are reactions upon circumstances legislation of possible or actual catastrophe. But others come represent exceedingly cautious, and somewhat distant, followings of carefully scrutinised examples. Compulsory insurance in Germany, Wages Boards in partly of the Australia, for example, influenced legislation in cautious adaptations England; while, on the other hand, it was fear of of carefully infection that produced first local, and finally general, examples, regulations with regard to health; 2 and in the past

¹ It is not intended to imply that an employer can have but one social function; he doubtless has many. But there is, inseparably attached to the position of employer and unable to exist apart from it, the possibility of voluntarily modifying conditions of employment according to individual design—in fact, of experimenting in employment. To make such modifications may be regarded as the distinctive social function of employers qua employers.

"The following statements are significant in this connection: "Sir Robert Peel was a millowner, and continued incredulous till the alarm of contagion arose, and he felt it his duty to watch things with his own eyes; he saw, though late, the abominations of the system, declared his conviction, and applied a remedy" (Quarterly Reniew, Dec. 1836, Article VII., p. 443). "It should be observed, that the Proprietors of some cotton mills, alarmed by the consequences of obliging their servants to work incessantly, have shuf up their mills in the night" ("A short essay written for the service of the Proprietors of Cotton Mills and the persons employed in them," 1784, in Proceedings of the Board of Health of Manchester, 1805). "Even this mitigated outbreak of cholera," said Howell, the factory inspector, in 1854, p. 392).

partiy of improvisations in the hour of need.

year drastic legislative measures have been carried without hesitation where, but for a great war, the most moderate suggestions would have been provocative of endless discussion and much bitter feeling. In cases of necessity the English do not fear to attempt the untried, but nermally and nationally they prefer to travel with some assurance of comfort along ways whose pitfalls have been marked and whose angles have been rounded by those who have There was no passed before. They are essentially conservative, yet they have been in the vanguard as an industrial people. No national example was there to guide England's steps when she passed through the Industrial Revolution.1 As best she might she made her way through its splendours and its horrors. The splendours were great; all the world wondered at them, and the nation rejoiced. The horrors were hidden in the hills and valleys beside whose streams stood the mills, or were lost in the whirl of life in the rapidly growing towns.2 Only here and there

national example to guide Eng-land through the Industrial Revolution,

and the problem was hardly realised.

> <sup>1</sup> The need of an example was emphasised at the Conference held by the Anti-Sweating League in London, 1908. "International action becomes possible only when some individual nation has led the way."

> <sup>2</sup> In this time of war, when we grow accustomed to things too terrible to be tolerated, it is interesting to note that Philip Grant, writing in 1866, observed that "the first cry of the children was, at that time [1796], unheeded, owing partly to the magnitude of the events which absorbed the public mind, partly to that apathy with regard to minor sufferings which the contemplation of great atrocities is apt to create. Pity and terror had been too much exhausted by the excesses of the French Revolution to be easily excited" (Grant's History of Factory Legislation, 1866, p. 7). Yet the horrors of the Industrial Revolution were such that we shudder at them even now, when the horrors of war are beginning to dead nour senses. Its evils, however, were not known then as evils are known to-day; occasionally those of the comfortable classes who had eyes to see saw the suffering of their poorer neighbours; but, nationally, the sorrows of the workers were unknown. True it is that to-day they are often discounted and waived aside, but no politician would dare to proclaim ignorance as did Lord Ashley when Sadler's Committee reported in 1832. "I had heard nothing of the question previously," he said,

did a Dale, an Arkwright, or a Peel pause in the rush of his prosperity to consider the welfare of his workpeople. Here and there, at Manchester, for example, the menace to public health induced magistrates to adopt restrictive regulations; but apart from such sporadic efforts the workers had no protection. They were at the mercy of their employers; and, if that often left them in a sorry plight, still there were stray examples of well-Employers regulated mills, and it was to these that England had to lead the way, as a nation turned for guidance when at last she became conscious that all was not well. More or less definitely, this has continued to be the case; and, down to the present day, employers still perform the function of pioneers of progress. Successful manufacturers set up standards of employment, and, so long as the capitalistic stage of civilisation lasts, this is inevitable. Even when individual capitalists are merged in companies or communities, such duties will devolve upon the employer. He is the "practical "nor was I even aware that an inquiry had been instituted by the House of Commons. Either the question had made very little stir, or I had been unusually negligent in parliamentary business" (Hodder, Life of Shaftesbury, 1886, vol. i. p. 148; also R. W. C. Taylor, Modern Factory System, 1891, p. 218). It is not ignorance of the facts which now withholds from workers the comforts and the amenities of life. It may be lack of understanding of the facts; it may be lack of power to deal with them; or it may be lack of heart; but lack of knowledge can no longer be pleaded in extenuation of indifference.

<sup>1</sup> Philip Grant (History of Factory Legislation, 1866, p. 116) and Samuel Kydd (History of the Factory Movement, by "Alfred," 1857, vol. ii. p. 247) both insisted upon the importance of experiment in convincing the public that shorter hours would not mean economic loss. Kydd quotes the case of John Edwards & Sons, of Halifax; Grant cites that of Robert Gardner, of Manchester. The latter seems to have appealed to Horner in a remarkable manner. He gives a detailed account of it (vide

"It has not been alleged that grievances do exist in all Cotton Mills "-some work in conformity with the principles of the Act. "From the practical experience of those Mills the regulations of the late Act were framed" (Society for Bettering the Condition of the Poor: Report of Select Committee, Dec. 3, 1802, Manchester, p. 9.

they alone having the necessary knowledge, which inspired confidence, man," the man whose opinion carries with it the weight of experience, and is listened to with respect in the nation's councils.¹ Doubtless an employer is often biased, and his opinions must be carefully scrutinised at all times; perhaps discounted, when they coincide with self-interest. Yet they cannot safely be ignored. "To 'practical' prophecies of overthrow of trade, of ruin to the operatives themselves, I could only oppose 'humanity' and general principles," said Lord Shaftesbury.² The support of Fielden and of Brotherton, both "practical" men, was therefore of the greatest importance to him.³

¹ The opinions of factory inspectors in regard to possible improvements carry weight in proportion to the evidence they can bring from factories as to the practicability of their recommendations. They are the spokesmen for the practical manufacturers.

<sup>2</sup> Written, about 1868, on a fly-leaf of Grant's History of Factory Legislation (vide Hodder's Life of Shaftesbury, 1886,

pp. 377-8).

<sup>3</sup> Speaking on the Factories Bill (May 10, 1844), Lord Ashley quoted several employers in support of his case, including "the owner of the largest establishment in Europe, Mr. Greg" (vide Appendix 1). "I have long been regarded." he said, as a monomaniac on these subjects, as a man of peculiar opinions, one having a fixed idea, but without support, or even countenance, in my wild opinions-yet is it not the fact that the reduction of the hours of labour is a question maintained and desired by many great manufacturers in the cotton trade? I may quote in this House the members for Oldham [John Fielden], Salford [Jos. Brotherton], Ashton [Chas. Hindley], and Blackburn. I will just indicate a few without its walls, and Blackburn. I will just indicate a few without its wans, firm friends of the measure: Mr. Kay, of Bury; Mr. Wilham Walker, of Bury, perhaps the largest consumer of cotton in that district; Mr. Hamer, of the same place, a partner in the firm of the late Sir Robert Peel; Mr. Ceoper, of Preston; Mr. Tysoe, of Salford; Mr. Kenworthy, of Blackburn; ... Mr. Hargreaves, of Accrington." To refute Mr. Senior's argument that the profit of the manufacturer arises from the labour of that the profit of the manufacturer arises from the labour of the last two hours, Lord Ashley quotes "a letter addressed, in April 1844, to the editor of the Bolton Free Press, and signed, "A Bolton Cotton Spinner," but known to be by Mr. Thomason, a highly respectable millowner—he speaks from personal experience; and what does he say? These are his words: 'There is also another consideration for employers, namely, that in a day's work of twelve hours, the last hour, by reason of the

When to practical experience an employer adds as their a genuine human interest in his workpeople, his ideas were individual influence is immediately felt, though may- into facts. be in a restricted area. The social efforts of some of the most sincerely generous employers of the present day are unknown beyond the neighbourhoods of their own factories, and the very names of many good employers of times past are forgotten in the districts where they lived. It was only when a when successful and generous employer was also articulate successful employers that he could become a generally recognised power are also in the realm of social progress. Dale was an example articulate to the employers of his day, but he lacked the power and the zeal of Owen; the light of his example, if not hidden under a bushel, was too diffused to illuminate the darkness of the Legislature. Owen came to London, flashed his light here, there, and everywhere, until it could not be ignored. He drafted a Bill and thrust it upon the notice of Members of Parliament; only so could they be they sway roused to a knowledge of the possibilities of their public opinion. position.

Owen managed a factory, discovered means of improving the conditions of the workers, devised ways of enforcing improvements upon manufacturers, and finally forced legislators to take a few uncertain steps towards that end. Few have such a record; Owen outran other employers, as he outran other citizens, in his zeal for well-doing.

exhaustion and listlessness of the workers, more especially young children of thirteen or sixteen, is the least productive in quantity and the least satisfactory in quality.' And he adds, mark this, 'The probability is, that the twelfth hour produces more spoiled work than any two hours of the day.' Here is the opinion of a practical cotton spinner, and it is confirmed by every statement that I have received on the subject, not a few experienced persons having declared that they could tell, by the feel and the appearance of the cloth, whether it had been made at the earlier or later periods of the day" (Hansard, May 10, 1844, p. 902).

To demonstrate the practica-bility of improved conditions of employment is the employers' social function; and, though often ignored,

it has been performed by them,

But the discovery and development of methods of improving working conditions have, at least since the time of the Industrial Revolution, been the peculiar function of employers, as such. This function has been largely forgotten or disregarded, both by employers and by the public. Busied with the obvious economic functions of the employer in the capitalistic state, theorists long ignored every other function, and, as a class, employers themselves, absorbed in the search for wealth; thought nothing of their social duties to the State. Yet, to a certain extent, those duties have been performed, and, necessarily, by employers, for no one else can perform them.1

Mr. and Mrs. Sidney Webb considered 2 it was "doing no injustice to the employers to say that, occupied only with " efforts to attain " the utmost possible productivity, and the greatest possible stimulus to improvement in processes," they had not contributed much to the problem how, in each trade, to adjust all the technical conditions' of the contract of service, so as to combine these with "the maintenance and progressive improvement of the manual worker's Standard of Life." "Even the best of these," they say, regard it as "no part of their business to rack their brains to discover how to maintain or raise the workmen's Standard of Life." Surely this is doing an injustice to "the best of them." 3 Not a few have "racked their brains" to this end, and to some purpose. Mrs. Webb herself asserts that it is to "Robert Owen-we owe the idea of

<sup>1</sup> N.B.—The term "employer" is applied to the "employing

party" (vide p. 5).

\*History of Trade Unionism, 1911 ed., p. xxxviii.

\*" Silently there is set up, in the eyes both of employers between the conditions which even the worst employer now finds himself compelled to give, and those which the best employer voluntarily concedes to his workpeople" (Mrs. Sidney Webb, Socialism and National Minimum, 1909, p. 29).

a Factory Act";1 and Mr. Webb, before the Royal Commission on Labour in 1892, remarked that "the practice in previous Factory Acts" had been to "defer to the opinion of those connected with the particular trades," and added that he would "not venture to suggest that any amendment of the law and can be either could or ought to be carried out without very performed by them grave inquiry and deference to the opinion of those only. concerned in the industry." 2 In theory and in practice it appears that the best employers have played a fundamental part in the gradual raising of the worker's standard of life. Indeed, step by step, the path of progress has been marked out by employers, through their individual efforts made from time to time throughout the nineteenth century.

As society is constituted to-day, the capitalist is not at liberty to wander where he will. While the present system is permitted to exist, he must follow more or less strictly the path laid down for him. It may possibly be pleasanter than that of the labourer, but to wander from it is to court disaster. Still, "the best of them" walk on the The best unworn edge of the path and broaden it thereby. few make short but venturesome excursions into the byways (of profit-sharing or co-partnership, for example), but most tread the established way, bound by the system of which they are nominal lords.

It is the part played by employers qua employers n raising the workman's standard of life which here by example directly concerns us. Nevertheless, we may briefly rather than consider the work of the few who have added, to their normal social service as employers, more conspicuous ervices as writers, agitators, or politicians. The atter have naturally attracted more attention, but hey cannot therefore be declared the more important. Agitator and employer were one in the case of

<sup>&</sup>lt;sup>1</sup> B. Potter, Co-operative Movement, 1895, p. 15. 2 Q3747.

## 16 SOCIAL FUNCTION OF EMPLOYER

Robert Owen; in the case of John Wood and Richard Oastler the two functions were separated; 'John Fielden was employer, agitator, and legislator as well. The value of such work cannot be measured by mere publicity.

#### CHAPTER II

#### EMPLOYERS' INFLUENCE ON FACTORY LEGISLATION

#### I. Public Work

We may first briefly consider the public work of Factory the employers most conspicuous in the movement legislation, the early for factory legislation in the first half of the nine-nineteenth teenth century, from the time when the first tentative century, Factory Act, masquerading in the guise of a Poor Law, was passed, till 1847 when, with the passing of the Ten Hours Bill, the principle of factory legislation, as we understand it to-day, may be said to have been effectively adopted by Parliament. Even before the time of Peel's Bill (1802) we find Dr. Percival, in the last decade of the eighteenth century, basing his recommendations for legislation based on on the excellent regulations in force in some factories. 1 employers' experience, In 1802 and again in 1815. Sie Bebert Best and again in 1815. In 1802, and again in 1815, Sir Robert Peel spoke as was initiated a factory owner; he drew attention to the diffi- by Peel, an culties which the humane master encountered when employer. he tried to impress upon his overseers that the apprentices and, later, other children must not be overworked.2 As Philip Grant points out, "the

Dale was probably among Percival's models (vide Percival's letter to Manchester Board of Health, 1796).

"Having other pursuits, it was not often in my power to visit the factories [his own]; but whenever such visits were made, I was struck with the uniform appearance of bad health, and, in many cases, stinted [sic] growth of the children. The hours of labour were regulated by the interests of the overseer, whose remuneration was regulated by the quantity of work done, . . . with effects to the rising generation so serious and Custom had to be abandoned;

overseers of the mills were paid by the master manufacturer according to the quantity of work performed, and consequently it was their interest that the children should do as much work as possible." The employer found it difficult to restrain the overseers, and to overcome this difficulty Peel was willing to risk violating the theory of industrial freedom.2 Since he spoke as one having authority in the realm of industry his word was accepted, and his first Bill was passed, practically unopposed,8

interest was the motive of employers such as Peel. A new interpretation ാf selfthe contribu-

but self-

In vivid contrast with Peel and his legislation in the interests of the employers, wherein the health and morals of the apprentices were little more than annoying details best dealt with en bloc, came Oven interest was with his visions of a new age.4 His contempt for

tion of Owen.

alarming that I cannot contemplate them without dismay" (Peel's evidence before the Select Committee on State of Children Employed in Manufactories, 1816, pp. 132-3).

Philip Grant, History of Factory Legislation, 1866, p. 7.
Peel's opposition to Sheridan's Bill of 1808, which proposed apprentice regulations which would have forced him to alter his arrangements with regard to child labour, was based on the grounds of industrial freedom. It may well be that his own convenience weighed heavily in both cases (vide S. and B. Webb,

History of Trade Unionism, 1894, p. 50).

The absence from Hansard of any debate in reference to this Bill seems to indicate that little importance was attached

"That Owen was directly responsible for the drafting of that Bill [1815], and for its introduction by Peel, is sufficiently proved by the numerous references to him in the debates and in the outside press. The friends of the Bill were silent, indeed, except when directly challenged, on Owen's share in the matter; but its opponents were proportionately insistent on giving him the credit of the measure. The reason is obvious. When, in 1815, Owen first commenced the agitation on the subject he was known to the world as a philanthropic millowner and an enthusiast in the cause of popular education; a man who preached social reform, and who gave unsparingly of his time and means in order to practise what he preached. But when the Bill came before the House for serious consideration in 1818, Owen's name unfortunately stood for something more than this. He had shocked the conventionally religious by his fervid denunciation of all the creeds; and by the extravagance of his remedies for social evils he had repelled the sympathies of many whose religious prejudices were unaffected. Lord Lascelles,

industrial success purchased at the cost of the workers might have made his advocacy of reform worthless had it not been for his conspicuous achievements as a millowner. It was as a successful employer, not as a mere theorist, that Owen influenced the British public towards factory legislation. "It seems as if whose reit would have been impossible for the humanitarians," markable influence on says Dr. Cunningham, "even with the sympathy of public some of the landed gentry and the approval of un-opinion represented artisans, to make any impression on the phalanx opposed to them, if it had not been for the results obtained by Robert Owen. In his mills at New Lanark he realised the ideals of the humanitarians of the day. His system attracted very general attention, and though it was not destined to last, it sufficed to demonstrate that extraordinary improvement, in conditions of work and habits of life, was not by any means necessarily incompatible with commercial success. From the first he made the condition of the living machinery the main object therefore, in opposing the Bill [Hansard, April 27, 1818, p. 351], thought it well to 'remind the House that the measure did not originate with Sir Robert Peel, but with a gentleman who had for the last twelve months made much noise in the public prints,' and who had said, from his own experience at New Lanark, that a reduction in the hours of labour, so far from diminishing the product, rather tended to increase it—a proposition beyond Lord Lascelles' powers of comprehension. Peel the younger in replying, urged that Lascelles ought not to oppose the Bill because a gentleman with speculative opinions in political economy was supposed to have brought it forward; whether that gentleman was concerned in it or not was a matter of indifference to him (the speaker), and he called upon the House not to reject a judicious measure because it might have the misfortune to be supported by an indiscreet advocate.' . . . And though Owen in later years forsook the battlefield, and betook himself to a cloudy land where the laws of political economy do not operate, it should not be forgotten that the first victory in the long campaign was due to him, so far at least as any achievement of the kind can be credited to the efforts and example of any single man" (Podmore's Life of Robert Owen, 1906, pp. 209-11). Compare "Sir Robert Peel had never thought of this measure until Mr. Owen had recommended it to him" (The Earl of Lauderdale, Hansard, Feb. 25, 1819, p. 655).

was due to his success as an employer.

of his consideration; and what he accomplished was wonderful." 1 Owen lost much of this influence when, in 1829, he severed his connection with New Lanark, but "it is hardly possible to exaggerate the effect of the impulse he gave to the work of social amelioration. . . . It required a long-continued agitation and years of legislative and administrative activity to bring up the conditions of textile industry in the country generally to those which he had voluntarily introduced in connection with his own works," 2

The next period of agitation for factory legisla-

Oastler and Sadler, who led the Ten Hours Movement,

tion is that dominated by the sentiment of Oastler. In 1829 Oastler's thoughts and feelings were wandering in the slave plantations of the West; it needed an employer, a practical business man, to recall them to his native land. It was, as Oastler gladly acknowledged,3 entirely due to a kindly, quiet, successful employer, John Wood, of Bradford, that he took up the cause of the factory children, and it was Oastler who at that particular time drew Sadler's 4 attention to the crying needs of the factory hands, and so set assistance to in motion the slow machinery which finally produced the Ten Hours Act. Wood, doubtless, would have been utterly incapable of carrying out such a campaign as Oastler's, but it was Wood's idea which originated it, and his financial assistance which, with that of Rand, Fielden, and other influential and successful millowners,5 helped to carry it out to a more or less successful end. Wood's work in connection with

owed inspiration and financial Wood and other employers,

of National Biography).

\* Vide "Alfred," History of Factory Movement, 1857, vol. ii. pp. 275 et seq.

<sup>1</sup> W. Cunningham, Growth of English Industry and Commerce in Modern Times, 1903, p. 75f.

<sup>&</sup>lt;sup>2</sup> Ibid., pp. 753-4. <sup>3</sup> Vide The Home Magazine, 1852 [pt. viii. vol. ii., "The Child's

Corner"], pp. 37, 45.

Sadler himself was actually a manufacturer: the firm in Relfast (vide Dictionary) which he was a partner had linen works in Belfast (vide Dictionary

factory legislation appears to be very generally under-whose in estimated by those who have looked back on the fluence i movement, but it was widely recognised at the time, estimate in spite of his retiring manner. One contemporary now, writer 1 asserts that no one did more for factory legislation than he.2

Many employers supported Oastler.3 It would but who be absurd to claim anything like universal altruism good intentions on the part of manufacturers, but the part they played in the movement for factory legislation seems to receive less than its due recognition from recent historians of the movement. It may be that individuals have been lost in the class to which they belong (though there is no justification for believing that the average employer was inhumane), and it is conceivable that the earlier historians overestimated the importance of the work of such men as Wood, were Walker, Fielden, Rand, and Gardner, but a glance acknow-ledged by at Appendix I. will show that Samuel Kydd and contem-Philip Grant, contemporary historians with intimate historian knowledge of the movement, unite in proclaiming the indebtedness of the factory workers to these and other manufacturers.

That an employer should really desire improved It was on working conditions seems to surprise some writers; a natural t the impu

"Alfred," History of Factory Movement, 1857, vol. i. p. 244. ceed fron \* Re Wood's influence (vide Appendix I).

<sup>3</sup> He himself believed that three-fourths of the manufacturers in the West Riding supported him, and quoted letters from manufacturers, Tory, Whig, and Radical, who, before he was aware that a single operative had taken up the matter, urged him to action ("Alfred," History of the Factory Movement, vol. i. p. 224).

Compare Hutchins and Harrison, History of Factory Legislation, 1911, p. 152. "So flagrant were the evils that legislative interference was petitioned for even by the masters themselves, i.e. the master-potters in 1862 (the italics are mine). The supporters of Sadler's Bill refused to believe in the integrity of the Factory Commissioners (who they considered represented the employers), even after their Report affirming the necessity of legislation. Especially suspect was their suggestion that with their first-hand knowledge.

he appears to be regarded as the "economic man". But, in fact, the employer who is daily brought face to face with the misery caused by unrestricted factory labour receives a more direct appeal to his humanity than men further removed from it, and employers, after all, are human beings, susceptible to this appeal. As Mr. Hartley Withers points out, the consumer is "the villain of the piece".1 It is his ignorance of the suffering involved that makes it possible for him to disregard the cry of the oppressed. Employers have not equal opportunities of blissful ignorance, and only the most stony-hearted could fail to respond to the appeal of the sufferers. Factory inspectors later on repeatedly called attention to the fact that the worst factories were spoken of as if they were universal, or at least common, while in fact they were not.

When Sadler lost his seat, the parliamentary leadership of the movement passed to Lord Ashley, whose knowledge of factory conditions, if not his interest in workers, was of but recent date. He himself thought it was "the twelfth hour," and urged that to Sadler should be given the honour of the achievement; but the event proved far otherwise. Ashley himself had resigned his scat before the second reading of the Bill of 1846, and the parliamentary leadership was entrusted to Fielden, who, having worked in a cotton factory as a child, was at that time an eminently successful employer in the same industry.2 It was Fielden who conducted the

Fielden, another employer, piloted the Bill of 1847 through Parliament.

only eight hours should be permitted to children under hirteen

(Quarterly Review, Dec. 1836, pp. 412-4).

'Poverty and Waste, 1914, p. 134. Compare "I do not care how hard hearted an employer may be, he is tender hearted as compared with the public" (Co-partnership, 1912 [B.M.

O8248. ff. 3(1)], p. 7).
Lord Feversham specially commented on the fact that Fielden, who introduced the Bill, was a manufacturer. "Who was the individual that brought the Bill into the other House of Parliament? It was the member for Oldham [Fielden], who Bill of 1847 through the House, and so achieved what was at the time felt to be the splendid victory of the Ten Hours Act.

### 2. From within their own Factories

It happened that the first Factory Bill (1802) and Thus emthe first successful Ten Hours Bill were both piloted ployers introduced through Parliament by men who were employers as one Factor well as members of the Legislature. But this was Bill after another. possibly merely incidental. On the other hand, to convince the country that regulation would not destroy industry was of fundamental importance. and this was the work of many employers throughout the manufacturing districts; indeed, it was actually dependent upon the master-manufacturers. Here and there were to be found, even in Parliament and A few inon the Bench, men who dared to speak out strongly dividuals anticipated in their zeal for humanity. "Should the manu-modern facturers insist," said Mr. Justice Grose,1 "that ideas, without these children they could not advantageously follow their trade . . . say . . . that trade must not for the thirst of lucre be followed, but at once, for the sake of society, be abandoned." 2 But, as

had spert a long life in conducting a large manufacturing establishment, and who had reared up his sons in the same occupation: and it was supported by upwards of a thousand of the principal master-manufacturers" (Hansard, May 17, 1847, principal master-manufacturers" (Hansard, May 17, 1847, p. 903). Greg also points out, though with some degree of contempt, that Fielden, an employer, suggested the establishment of Wages Boards, and prepared a Bill to that end (R. H. Greg, The Factory Question, 1837, p. 68). Greg further says: "It is only fair to observe, that for these improvements [viz. prohibiting sight and prepared to the same probabilities of the same probab prohibiting night work for all under twenty-one, and advancing the ages entitled to protection from sixteen to eighteen years] Sir John Hobhouse's Bill was indebted to the committee of the millowners, then in London; and that the same provisions of the existing law were also introduced by the millowners, in opposition to the wishes of those who framed it " (ibid.).

Lancashire Gazetteer, July 4, 1801; quoted by Hutchins and Harrison, History of Factory Legislation, 1903, vide pp. 14, 15, 28.

Compare the following: "Perish the cotton trade, perish even the political superiority of our country (if it depends on

but economic theories, then generally accepted,

Podmore said of Owen,<sup>1</sup> "A man who could so lightly contemplate interference with England's monopoly of the world's markets, for the sake of anything so irrelevant as the honour of the country, or the education and well-being of the children of the poor, was clearly dangerous in the eyes of men who had long ago, in Lord Salisbury's phrase, written these things off their books as unmarketable commodities."

could be refuted only through the experience of employers. The only way in which England could be brought to place a ban on the degradation of the manual workers was to convince it that prosperity was not dependent upon such degradation. Obsessed as the nation then was with the desire to outdo its rivals, and bewildered by the economic theorists of the time, it resembled their "economic man". Just as Joint-Stock Companies were too remote from their employees to feel their sorrows, so Parliament itself, eager for national prosperity, took little thought for individual sufferings. In the twentieth century it is more or less widely recognised that if a trade will not yield an income "sufficient to enable those who earn it to secure at any rate the necessaries of life . . . it is a parasitic trade, and it is contrary to the general

That (1) a trade injurious to the workers is unprofitable to the nation.

the cotton trade), rather than they shall be upheld by the sacrifice of everything valuable in life by those who are the means of supporting them "(from a Speech at Glasgow, Owen's Autobiography, vol. i.A. 1858, p. 18). "When the hon member gets up and tells me that the Manchester manufacturers are likely to suffer, I say, let them suffer. I, at least, will not be a party to the perpetuation of any such atrocities as I find recorded" (J. A. Roebuck, M.P. (Sheffield), speaking on the Bleaching and Dycing Works Bill, Hancard, March 21, 1860, vol. clvii. p. 997). "He said at once, without any circumlocution, that rather than subject his countrywomen to that horrible atrocity (of fourteen hours' labous), he would prefer to see bleaching works altogether disappear" (ibid., June 27, 1860, vol. clix. p. 1061). Mr. Roebuck had formerly vehemently opposed factory legislation on economic grounds. Possibly the effect of previous factory legislation subconsciously influenced him in his later judgment.

<sup>1</sup> Robert Owen, 1906 ed., p. 198.

Compare Appendix V.

well-being that it should continue"; 1 but a century ago those who advocated regulation had the support neither of this theory nor of that experience which and that (2) "teaches that the usual result of legislation . . is legislation does not not to kill the industry but to reform it ".2 In-destroy individuals there were, even then, who would not dustry, touch the profitable cotton trade, because of its was not associations; but the nation loved it and clung to it, known to the despite attendant evils, for it loved the prosperity for of the which it stood.3 From within, more genuinely than is cotton industry. commonly realised, came the regulation of industry.

At a time when Nassau Senior gave the weight of Senior's his academic knowledge to the doctrine that the whole a priori profit of the manufacturer was derived from the last hour of an eleven-and-a-half-hour day,4 and the

<sup>1</sup> Select Committee on Home Work, 1908, p. xiv.

<sup>2</sup> In the long run, no doubt, as most economists have come to believe, industries are not weakened but actually strengthened in their capacity to brave the struggle for existence by improved conditions of labour, which tend to increase the efficiency both of employers and employed, but there is no lenying that there may temporarily be some difficulty in introlucing factory regulations which are conspicuously beyond the standard of a foreign competitor" (Mrs. Sidney Webb, Socialism

 Ind National Minimum, 1909).
 England, by the White Phosphorus Matches Prohibition Act of 1908, did venture to prohibit entirely one branch of manuacturing industry; but not only was this accompanied by the prohibition of the import of such matches, it was not made until two years after Denmark, France, Germany, Holland, Italy, Luxemburg, and Switzerland had agreed to prohibit their manufacture. The advantages of International Regulation of Industry were urged by Owen in 1818, but have as yet been put to little test; the prohibition of the employment of women in factories within a month after confinement (1891), of the labour of children under twelve in factories (1901), and of the manufacture and sale of matches made with white phosphorus (1908) may be traced to the influence of international conferences; but the British Government was first officially represented at a conference of the International Association for Labour Legisation in 1910 at Lugano, though Mr. Herbert Samuel (then Under Secretary) and Mr. Delevingne of the Home Office represented the British Government at the International Conference on Labour Regulation held at Berne in 1906 (vide Hutchins and Harrison, History of Factory Legislation, 1911 ed., pp. 269-72).

<sup>4</sup> Twelve hours on five days, nine hours on Saturdays (Letters on the Factory Acts, N. Senior—Hutchins and Harrison, p. 88).

was refuted by the logic of experience.

The assertion that short hours "pay"

Spectator set to work to refute his arguments by a priori reasoning and speculations as to possible changes in markets or machinery, the simple evidence of a manufacturer who had actually reduced hours without loss of any kind, was really astounding.2 No wonder his experiment "excited a good deal of public attention" in the district where it was made. "The declaration made," said Horner, "is that the same quantity of produce, and at the same cost, has been obtained by the master; and that all the workers, day hands as well as those who are paid by piece work, earn the same amount of wages in the eleven hours as was done before by the labour of twelve hours." 3 It was incredible! But close examination proved it true. Robert Gardner's explanation is delightfully simple, but it seems to have escaped the notice of many wise and prudent men. "All the arguments I have heard in favour of long time," said Gardner, "appear based on arithmetical question—if eleven produce so much, what will twelve, thirteen, or even fifteen hours produce? This is correct, as far as the steamengine is concerned. . . . But try this on the animal horse, and you will soon find he cannot compete with the engine, as he requires both time to rest and feed." Gardner "tried it" on his workpeople. He perby Gardner's formed the simple experiment of varying the hours while keeping other conditions constant; and he awaited results. The results surprised him, for he received the same work—in some cases even more work-in less time. The experiment convinced him in spite of himself, for he was sceptical at first.4

was proved experiments,

<sup>1</sup> March 23, 1844.

<sup>&</sup>lt;sup>2</sup> Robert Gardner, of Preston. He must not be considered singular. This example is chosen merely because it was described in some detail by Horner, in 1845. The multiplicity of such examples throughout the manufacturing districts was an essential part of the propaganda for the limitation of hours (vide Appendix II).

<sup>\*</sup> Reports, vol. xxv., 1845, pp. 19-22. \* Vide Appendix II.

The facts differed from his preconceived ideas, and he abandoned his ideas in favour of facts. To this day people persist in arguing about what would happen in these circumstances or in those; and even when it is possible, they hesitate to put the matter to the test.1.

Gardner's experiment convinced Horner that "in other mills of the same description" it might be safe to follow his example, but he adds that he does not consider this "any ground to justify a further legislative restriction," for "in a very large proportion of the factories of the United Kingdom, a reduction but deepof hours must of necessity cause a reduction of the rooted fallacies die quantity produced." He thereupon returns to his hard. a priori reasoning, and adds thereto the conclusion that "if the interests of the master and workmen go together there is no occasion for a law"; and so he uses in 1845 the argument into whose bearings in 1915 we must look hereafter.2

It is customary even yet to look doubtfully upon Employers' ameliorative recommendations made by master-practical suggestions manufacturers. The Factory Commissioners of 1833, guided even while adopting the employers' suggestion with legislators, regard to the appointment of paid inspectors, attri-

1 Professor F. W. Taussig, in 1915, says, "The universal introduction of the eight-hour day would mean (other things being unchanged) a lessening of the national dividend"; and, though he saves himself by his parenthesis, he further states, "It is very rare that [factory operatives] can do as much in eight [hours] as in ten" (p. 295). It would probably deceive the reading public less if he said, "There is at present little evidence that factory operatives can do as much in eight hours as in ten." There is perhaps no reliable evidence to the contrary. Moreover. "other things" cannot be "unchanged" when two hours are added to the leisure of the workers; and these hours are not necessarily unproductive from the point of view of the "national dividend". "Not proven" is the only safe verdict upon human affairs when the reasoning is a priori. Mr. J. W. Ramsbottom believes that more data exist but have yet to be collected and tabulated ("Industrial Fatigue," in Economic Journal, 1914, vol. xxiv. pp. 393 et seqq.). 2 Vide pp. 150 et segq.

buted it to self-interest.¹ Yet it was this practical suggestion, adopted after many years,² which made factory legislation effective in the United Kingdom. In methods of administration of the Acts there has been no other step comparable with this in importance. It is perhaps too soon to speak of the effect of the entirely new departure made in the appointment of Works Inspectors³ in the Potteries. Their appointment also appears to be due to recommendations made by manufacturers, and it seems thus far to have been attended by a fair amount of success.

and paved the way of progress. Apart, however, from technicalities of administration, there are the provisions of the Acts themselves, provisions with regard to health and safety, the payment of wages, and the hours of employment. It would be difficult to find any direction in which individual employers had not made experiments in advance of legislation and in which experiments are not even now being made. To assign to each its several effect is an impossible task, but it is quite possible to trace out the general current of influence.

"From the excellent regulations" existing in some unnamed factories, Dr. Percival, at the close of the eighteenth century, derived his ideas for legislative regulation for the sake of health. Owen testified to his own successful limitation of hours. Wood, Walker, Fielden, and other employers in the thirties, having done all they dared in advance of general practice, turned for help to Parliament,

<sup>1&</sup>quot;Southwood Smith et Edwin Chadwick font partie, en 1833, de la Commission qui organise un bureau central d'inspecteurs des fabriques sur le modèle du bureau central des commissionaires de la loi des pauvres" (Elie Halérey. La Formation de Radicalisme Philosophique, 1901-4, vol. iii. p. 385). Bentham's ideas undoubtedly influenced the Commissioners, yet, as they remarked, the proposal was "urged upon them chiefly by those manufacturers who desired to see the hours in other factories restricted to the level of their own" (vide Hutthins and Harrison, History of Factory Legislation, 1903, p. 39).

Owen proposed it in his draft Bill.

As they are called locally (vide Appendix XII).

and, thenceforward, "good employers" begged for legislative protection for themselves against less

scrupulous neighbours.

With the advent of the expert inspector and the Expert inissue of regular reports on factories, there was made spectors, a direct channel of communication between the best employers and the Legislature. Inspectors, visiting factories, were shown alterations (which were intended to be improvements), and new schemes were often sabmitted to them for approval. They thus became conversant with the best in all factories, as well as with the worst; and their recommendations were undoubtedly received with respect, and formed the basis for further legislation. Such expert know- by their ledge has become more and more essential with the knowledge, development of industry, and factory legislation without the advice of Home Office experts is now practically impossible. When the employer had opportunities of talking with inspectors, showing them improvements in his own factory, and grumbling about his neighbours' shortcomings, he no longer their disfelt so strongly the necessity for direct individual crimination, appeals to Parliament. In the inspectors' reports may be found many accounts of "excellent regulations," of shortened hours, of guarded machinery, of conveniences of all kinds, occasionally of luxuries.1 It has been usual for those who have made use of the inspectors' reports for the purpose of writing accounts of industrial development to extract from them the records of harsh regulations, long hours, accidents, and miseries. In these the records abound. But there is another side to the picture, or rather another finger to the signpost, pointing towards and advice, another and more hopeful way. The inspectors, even beyond the limits of whatever was the purpose for which they were the law, appointed, added to their duty of seeing that the

law was obeyed the happier duty of seeing how it 1 Vide Appendices II and III.

## 30 INFLUENCE ON FACTORY LEGISLATION

was outrun, and upon their reports, to a great extent, factory legislation was built up. This function of Home Office experts has been extended and amplified, until to-day, without new Acts of Parliament, Statutory Orders issued by a Secretary of State may enforce, upon all employers in a trade, regulations which have been proved, by one or more employers in that trade, "reasonably practicable". This change has in no way diminished the importance of the part played by individual employers, though it may possibly have rendered it less conspicuous to the general public and to Parliament. Experiments are still essential and are still carried out by employers acting on their own initiative.

while withdrawing attention from individual employers, render their example more effective.

<sup>1</sup> Vide Appendix XI, and Professor F. Tillyard, "Non-Parliamentary Industrial Legislation," in Economic Journal, Sept. 1915.

#### CHAPTER III

CHANGE IN THE NATURE OF INDUSTRIAL LEGISLATION; ITS RELATION TO EMPLOYERS' EXPERIMENTS (Vide Appendix XI.)

By the middle of the nineteenth century the prin- By the ciple of factory legislation, as far as the limitation of middle of the ninethe hours of labour for women, young persons, and teenth cenchildren was concerned, may be considered estab-tury the lished, for even the Factory Law Amendment Associa-factory tion (subsequently merged into the National Associa- was estabtion of Factory Occupiers), whose ultimate object was lished. the repeal of the Factory Acts, disclaimed any intention of attempting to alter the hours of labour "as by law at present limited," or "to abolish factory inspection." But it must be remembered that only a limited number of trades was affected. The law was firmly established; its history during the next half-century was mainly one of expansion. Em- As the ployers engaged in a particular industry united in demand arose, attempts to improve conditions by agreements among themselves; but such attempts commonly proved futile, as two or three dissentient masters were able to defeat them. The best employers in that industry would then ask for special legislation for their trade as a profection against those who were less scrupulous; and so the law was extended trade by it was extrade—for example, amongst others, to bleachers tended trade by 1 Vide Hutchins and Harrison, History o Factory Legislation, trade,

1903, pp. 114-6.

and dyers (1853),1 to potters (1864),2 and to dressmakers and milliners (1867).3

In practice it has been found much easier to frame regulations for one trade than for many, and this has doubtless increased the tendency of legislation to extend along the lines of separate trades. The results of an experiment are often applicable only within the limits of the trade in which the experiment is made. Guards for particular machines, for example, the heat requisite for a particular process, the prices to be paid for particular jobs, even the possibility of supplying specifications of work to be done, must be determined within the trade itself.

through the influence of specific example,

and the recognition of danger.

There is a further reason why regulation has proceeded trade by trade. The varying degrees of danger connected with different trades arouse varying degrees of public interest. The general theory of factory legislation appears to have been that, where it can be plainly shown that the health of the workers or the safety of life or limb is at stake, legislation should enforce precautions; but, beyond this, matters may be left to individuals or to voluntary

<sup>1</sup> In the bleaching industry, "in June 1853 thirteen of the employers in Scotland agreed to limit the hours of labour to sixty-six hours in the week. On a subsequent occasion twentythree masters, representing a large proportion of the whole, agreed to limit the hours to sixty in the week, but upon the condition that such a regulation was adopted by the whole trade. It was found, however, that it was in the power of two or three masters to defeat such an arrangement, and that it was impossible to carry it out without legislative interference"

(Hutchins and Harrison, 1903, pp. 131-2).

In 1862 the employers in the pottery industry, "including such well-known names as Minton and Wedgwood, signed a memorial to the Home Secretary . . . deploring the fact that children were frequently employed before the age of ten, pointing out the 'moral and physical evils' that resulted, and stating that in the absence of legislative enactment it was impossible to right those matters by voluntary agreement, 'as a portion only of the employers could be brought to consent to such an agreement' "(ibid., p. 152).

In 1864 the "more enlightened employers" in the sewing

trades "recognised the disadvantage of late hours" (ibid., p. 163).

organisations.1 To the general public, "dangerous trades," with their conspicuous ills, make an appeal which permits the enforcement of extensive and minute regulation. Some thirty-odd trades are now certified to be dangerous, and these are subject to special regulations of their own in addition to the ordinary Factory Acts. Within these trades experi- As proviments of individual employers mark out possible sions must lines of progress. It will be seen that the influence ably practiof a good employer, limited, as it generally is, to a cable, small section of the industrial world, is intensified within that section. Since regulation can only proceed where there is evidence that provisions are the respec-"reasonably practicable," there has developed a tive merits of individual new type of Factory Legislation, namely, that practice of experts in the Home Office instead of that of must be assessed by Parliament.

Since the Consolidating Act of 1901 there have to whom been only three Acts devoted to the extension of Parliament Factory Legislation.<sup>2</sup> They deal with laundries details of (1907), the use of white phosphorus (1908), and legislation. cotton cloth factories (1911). It is characteristic of the general movement that the last of these consists merely of two clauses, one to name the Act and one to empower the Home Secretary to make regulations for the protection of health. What is in effect growing, rapidly and yet almost unobserved by the public, is expert legislation by permanent officials.3 The Home Office regulations are manifold. Their power extends throughout the factory system and in some cases strikes deep down into the details of a trade Considered dangerous. It speaks volumes for the isdom of the officials of the department that

Vide Appendix XI.

<sup>1</sup> Vide A. Shadwell, Industrial Efficiency, 1909, p. 286.

Three other Acts (6 Edw. VII. c. 49, s. 10; ditto, c. 53, ss. 4, 5; ditto, c. 58, ss. 8, 13, sch. 3) have sections relating to factories, and one (7 Edw. VII. c. 10) repeals a section which related to the employment of women.

this process creates so little disturbance, in spite of its effective development.

Conferences

with employers and operatives in a trade.

Departmental Committees, Inter-departmental of inspectors, Committees, and even International Conferences, attended by Government representatives, may perhaps be regarded as indicating further extensions in the method of expert regulation; and there is an important collateral movement towards systematic conferences between employers, operatives, and inspectors, for the purpose of discussing means of securing the safety and health of persons employed. The scheme was initiated in 1912 in accordance with the advice of the Accidents Committee.1 Cotton-Spinning was the first industry in which a conference was attempted, and it resulted "in a substantial degree of agreement upon many important details" which was believed to be "of material service, not only with regard to the administration of the Factory Acts in cotton-spinning mills, but also as a basis for discussion of allied points in the similar conferences" 2 which were to follow. Woollen and Worsted Mills, Cotton-Weaving Factories, Iron Foundries, Tinplate Factories, Cotton Bleaching, Dyeing, and Printing Works were the next to receive the attention of representative conferences.3 In recommending such conferences the Accidents Committee pointed out that "in this way . . . it would be possible to spread [that is, within the trade] the knowledge of any new method for securing safety and to obtain compliance therewith much more quickly than is done at present. ... We ... contemplate that such conferences will often have the effect of avoiding the necessity for legal proceedings and also of enabling the in-

Report on Conferences between Employers, Operatives, and Inspectors (Cotton-Spinning Mills), 1912, p. 2.

\* Vide Official Publications—Reports on Conferences between Employers, Operatives, and Inspectors.

<sup>&</sup>lt;sup>1</sup> Report of Departmental Committee on Accidents, 1911, **p**p. 22, 23.

spector to secure the carrying out more quickly of hasten the precautions of a novel kind such as he hesitates to try adoption of to enforce by resorting to legal proceedings." The regulations. provision of first-aid dressings, for example, was approved by one conference,2 and this practically means that in the trade represented such provision becomes universal. It may seem to the public a small matter, and to some employers it may seem a profitable investment of money; but as it is not generally enforced by law, workers are dependent upon employers for it. It is, in fact, an "elementary 'welfare' provision".3 In one trade, through the conference, it becomes recognised as "involved" in the idea of employment; and so something is added to the accepted standard of comfort in that trade.

The idea of conferences is by no means new; Similar con-R. J. Saunders, one of the first inspectors of factories, ferences had been held arranged similar meetings, and duly reported on previously, their merits. He invited overlookers to meet him in 1849, to discuss the prevention of accidents. "I in a less was very glad," he said, "to avail myself of the great systematic intelligence and experience thus brought to bear on a matter of so much moment, and am indebted to the parties who attended for several valuable suggestions." 4 It is merely the attempt to systematise such conferences that is of recent date; and it enhances the importance of inconspicuous efforts on the part of individual employers towards the establishment of good conditions in factories.

Another step, which may prove to be the first along an excellent way, was that taken by the Joint Committee of Pottery Manufacturers of Great Britain, who in 1913, with the approval of the Home

Report of the Departmental Committee on Accidents,

Report of the Tinplate Conference, 1914, p. 5.

<sup>&</sup>lt;sup>3</sup> Vide J. C. Goldmark, Fatigue and Efficiency, 1912, p. 45.
<sup>4</sup> Reports from Commissioners, vol. xxii., 1849, p. 321.

Trade Exof quite

and supplement other

attempts at spreading

information.

Office, held a Trades Requirements Exhibition at hibitions are Stoke-on-Trent. Pottery manufacturers exhibited, recent date, in use, various contrivances for the protection of workers. The Parliamentary Under-Secretary for Home Affairs (Mr. Ellis Griffith), in opening the exhibition, expressed his opinion that it would create a precedent which would be followed in other industries,1 and, though it was the result of recently issued regulations rather than a starting-point for further legislation, its influence should not be underestimated. It was a practical demonstration by practical men of what they were actually doing towards making their so-called "dangerous" trade as healthy as any other. The results of employers' experiments 2 were made public in a very effective way. Formerly, descriptions or drawings in the reports of factory inspectors or departmental committees had to suffice in explanation of any improvement recommended, though occasionally enthusiastic inspector, with one employer's permission, ventured to conduct another personally to witness the excellence of the arrangements made for safety or comfort. But nothing like a general trade demonstration of the best provisions for the workers had previously been attempted in England, and it marks a distinctly important stage. The exhibition was arranged by the manufacturers themselves; therein lay its effective interest.

Legislation

by experts

The change in the mode of industrial legislation may be summed up as a tendency to move from the politician towards the expert. This tendency is marked by minor distinguishing features. The most conspicuous evils of the industrial system are the first to attract the attention of politicians; experts look below the surface and are more keenly conscious of the practical difficulties and possibilities in each

1 The Pottery Gazette, 1913, p. 786.

As well as those of manufacturers of machinery, etc.

But an expert is necessarily a specialist in one section, and he may fail to obtain broad views of the whole situation. If the whole field of industry were covered by experts, the legislation might be adequate; but there are gaps of astonishing magnitude. The factories and workshops in the leaves large United Kingdom which are under Regulations or gaps, Special Rules, on account of the nature of the work carried on in them, number about 74,000 out of a total of about 277,000,1 so that nearly three-quarters of the factories have no legal supervision beyond that afforded by the Acts of Parliament. Such gaps existed before, for it was only in sections that the field of industry was brought under factory legislation; but the experts' labours have exaggerated the distinctions. Between those forms of unregulated industry which exist to-day and the most highly regulated industry, the difference is probably greater than between the conditions of labour in cotton mills and those in other mills at the time when laws were first made for the cotton industry alone. It is well to remember, while contemplating with admiration the improvements made in some quarters, the limitations, which are inevitably associated with the inevit the work of specialists, in which no attention is given able result of specialisato the general effect. As Redlich points out, "a tion. systematic view of a modern state in all its complexity with scientific laws and regulations was utterly strange to English thought, steeped as it always had been in empiricism, and only inclined to such piecemeal legislation as a particular grievance or a particular occasion might demand." 2 Though factory inspectors have done much towards systematising and co-ordinating factory legislation, there is still much to be desired in that direction.3

<sup>&</sup>lt;sup>1</sup> Factory Report for 1914 (Cd. 8501 of 1915), pp. 123, 132.

<sup>2</sup> Local Government in England, 1903, vol. i. p. 91.

<sup>3</sup> As an example of the existing chaos of legislative regulation we may consider that relating to hours of work. It is

It must be supplemented by raising the standard of factory hygiene as a whole,

If, as the Principal Lady Inspector of Factories declared, "progress in health in factory and workshop life is mainly a question of raising the ordinary general hygiene," 1 the figures quoted above suggest a national menace. Of course it would not be true to say that no progress is being made in factories to which no new Acts or Regulations apply. The influence of factory inspectors is constantly towards improvement, and the conferences between inspectors, employers, and employees influence other specific industries besides those with which they are directly concerned.

Much wider general interest and much more adequate information are necessary before the anomalies of factory law can be obviated. In some cases there exist sufficient data to warrant immediate action on the part of the Legislature: in other cases it must needs wait upon the further experiments of employers. In all cases, it would seem that the theory that only dangerous trades need regulation movement in is breaking down; or perhaps it would be more accurate to say that the definition of "danger" is widening. Low wages are beginning to be considered "dangerous," and in certain trades a minimum wage has already been established.2 Provisions for decency

tion.

"hopelessly inconsistent in its inclusion or exclusion of adult males, in its distinctions between mines, textile and non-textile factories, laundries, men's workshops, etc., and in its overtime provisions; but more important than this inconsistency is the fact that the whole of the regulation is purely empirical in its origin, and, moreover, that any scientific judgment as to the suitability of any specific regulation is at the present moment impossible" (J. W. Ramsbottom, "Industrial Fatigue," in Economic Journal, 1914, vol. xxiv. p. 393).

1 Interdepartmental Committee on Physical Deterioration,

1903, Q1518.
2 Under the Trade Boards Act of 1909 minimum rates were to be fixed in four trades, namely, tailoring; cardboard, paper, and chip boxmaking; machine-made lace and net finishing; and chainmaking. In 1913 four other trades were scheduled under the Act-shirtmaking, confectionery, hollow-ware, and tin boxmaking.

are gradually being recognised as necessary for "safety," and are now, to some extent, required by law in all factories. The development of the conception of health and safety is of the utmost importance. Herein the good employer performs an essential service to the community.

There is a definite connection between individual General proexperiment and general progress, and it is worth gress still depends

noting that not only in framing regulations are upon inemployers' experiments significant. In all cases dividual employers where the wording of the law is vague, employers' interpretations exert an important influence; inspectors want all factories to equal the best they see; and workers, too, believe that the most comfort-

employer can be done by all, they argue; or, if not, some other concession should be made. It is probably due to the variation in interpretation by the emplovers that there has, in recent industrial legisla-

able factory can be copied. What is done by one

tion appeared a curiously elastic arrangement. Words even specific such as "adequate" and "sufficient" occur fre-regulations

quently, even in regulations of recent date; and vaguely

<sup>1</sup> The extent to which the carrying out of regulations, even those made for a specific trade, depends upon individual interpretation may be suggested by the following extracts from the thirty-two regulations made "for the Generation, Transformation, Distribution, and Use of Electrical Energy" (1908, No. 1312). In only four regulations can the requirements be considered really definite. Here are the vague words employed in the

others:

1. sufficient . . . reasonably | 10. . . . . . practicable.

 efficiently . . . necessary. . where Reasonably pacticable.

3. efficient.

4. with proper care.

effectively.

6. proper.

7. efficient . . . suitably.

8. efficient . . . suitably . . . necessary.

9. . . . . .

11. efficient . . . suitably.

12. efficient . . . easily.
13. efficient (twice) . . . properly constructed . . . efficiently (three times).

14. Reasonably practicable... readily accessible . . . readily traced . . . readily distinguished.

15. suitably.

16. so far as practicable (twice) ... adequate precautions.

thereby, interpretations in advance of minimum requirements are encouraged.

legislators are beginning to take account of the fact that minimum requirements are frequently exceeded. Concessions are made with a view to encouraging movements in a desired direction. For example, the Pottery Regulations of 1913 require at least one lavatory basin, or two feet of trough, for every five persons employed in certain specified processes. They further require that "before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal-times, shall be allowed for washing to each such person"; but the proviso is added "that if the lavatory accommodation specially reserved for such persons exceeds that required by the preceding paragraphs, the time-

```
17. ample . . . adequate means
     . . . adequately . . . suit-
     able.
18. adequately.
19. so far as reasonably prac-
     ticable.
20. suitable.
21. adequate.
22. adequate.
```

- 24. suitable . . . adequately. 25. adequate.
- 26. adequately.
- 27. adequately.
- 28. adequately.
- 30. substantially . . . efficient.
- 31. . . . .
- 32. easily and safely . . . adequate . . . ample.

23. adequately. The above set of regulations was chosen at random; but as the result seems unduly emphatic in its support of the text, similar extracts may be given from the last Regulations issued in 1913-"Duties of Occupiers" of all factories and workshops wherein is manufactured chromate or bichromate of Potasstum or Sodium (1913, No. 844). Only two regulations are really definite. The vague words follow:

- securely fenced (partly defined, if not "impracticable") . . . other equally efficient means . . . secure barrier.
- 2. dangerous places . . . near ... efficiently lighted.
- 3. efficient.
- 5. due . . . necessary medical treatment.
- 6. at hand . . . responsible person.
- 7. sufficient and suitable overall suits and protective coverings.

- 8. suitable respirators.
- 9. suitable meal-room; suitable place for clothing; suitable place for the storage of overall suits.
- 10. in a cleanly state and in good repair . . . sufficient
- supply of clean towels ... sufficient and suitable bath accommodation . . sufficient supply of soap and towels.
- 11. . . . . .

allowance may be proportionately reduced, and that if there be one basin or two feet of trough for each such person, no allowance of time shall be required."

The attempt appears to be, to place alternatives before employers, and yet to ensure the workers' comfort; to permit freedom, but only freedom to do well.

To sum up, then, it may be said that industrial legislation is not at a standstill, but its growth is spasmodic and almost entirely due to departmental exertions. As regulation is largely in the hands of experts, experiments conducted by employers become of increasing significance. But the national interests demand that wider surveys shall be made of the field of industry, so that the spaces between the so-called "dangerous trades" may receive due attention.

1 Regulation 11, Jan. 7, 1913.

#### CHAPTER IV

### CHANGES IN THE EMPLOYERS' ATTITUDE TOWARDS FACTORY LEGISLATION

employers go through four stages of social progress:

Historically Side by side with the change in the nature of factory regulation there has been a very gradual change in the attitude of the best employers towards legisla-. It may be said that there are four stages through which employers pass, and, though Owen's enthusiasm carried him to the final stage a century ago, the majority of them have by no means reached it even vet, and some are apt to lose their way.

After having abandoned (I) the principle of laissez-faire, they (2) ask for legislative protection,

some of them en-

courage

till (3) their confidence makes them indifferent to legisla-Lastly (4), legislation, while others turn back.

First there are those who stick in the mud of laissez-faire. Beyond them are those who, though willing and even anxious to give better conditions, fear the competition of their neighbours, and demand legislation as a protection for themselves against their less kindly rivals; they beg for assistance in their efforts to get out of the mire. Next we find those who are confident that they can walk alone; give their workers good conditions, frequently assure the world that "it pays"; they are indifferent to legislation. Beyond them, on one side, we see those who oppose further legislation; on the other, those who do all they can to encourage and to guide it. The former may oppose legislation because they verily believe it would be prejudicial to their weaker rivals if higher standards were enforced; or because they delight in a consciousness of virtue not without its immediate may, however, wander through reward. They

"Serbonian bogs of Social Betterment" until they are lost once more in the neighbourhood of laisseztaire, whence the path of progress originally led. Those who favour legislation, on the other hand, while doing all they can in their own factories, lend the weight of their experience to the enthusiasts who are endeavouring to bring the laggards into line. Their path is straitly hedged by Public Opinion. Though stunted and uncertain at first, the hedge, before long, assumes the form of Acts of Parliament and Statutory Orders, and the path passes onwards towards the undiscovered country of social justice. The divergence between the two paths is slight at first, and may escape notice; but the signpost of the second bears the legend "Justice," while the half-effaced letters on the other appear to spell "Philanthropy."

It must be remembered that employers move Employers along these paths as individuals, not en masse, but as progress as individuals the general tendency is forward the whole group appears to move. No part of the route is quite without travellers; but the region of complete laissez-faire is becoming depopulated, and the yet the tendency to move away from it is conspicuously effect is a marked. Those who ask for legislation before they vance.

<sup>1</sup>G. D. H. Cole (World of Labour, pp. 2 et seq.) speaks of "Serbonian bogs of social 'betterment," yet he affirms that: "The release of the worker will come only by a gradual improvement in working conditions." "Employers," he says, "are even now beginning to find out that, in some trades at any rate, high wages pay, and they will come to find that it pays to devolve a great measure of workshop control on the employee. Workshop committees and pleasant working conditions will gradually become the rule in industry. • • And, when matters have got so far, the Trade Unions will certainly have a strong case for demanding that they shall go further" (p. 12). He adds: "There are indications that such a devolution is beginning in . . . [the] . . recently published Experiments in Industrial Organisation" (ipid., footnote). Perhaps one may be permitted to suggest that the hedges of legislation draw nourishment from the despised "Serbonian bogs," while serving to mark the way which leads safely past them.

# 44 EMPLOYERS' ATTITUDE TOWARDS

can or will move are now to be found in what are regarded as "sweated trades"; 1 but half a century ago "such firms as Minton and Wedgwood, [while] ready to petition for legislation . . . could not risk

venturing on independent action." 2

In the thirties and forties the majority of humane manufacturers were at this stage; but the legal restriction of hours, once established, formed a basis for further improvement without legislation. Formerly, employers who would not work long hours when there were rush orders, seem to have lived in terror of having their trade taken from them by their rivals. How well founded this fear was, it is difficult to tell; but the establishment of a legal maximum, in practice, meant that those who usually worked shorter hours were able to work overtime when it was deemed necessary, while those who worked the full maximum could only work overtime in special cases regulated by law. Thus, with the Acts in the background, greater elasticity is an im-

· 1 The Select Committee on Home Work (1908) dealing with employers in sweated trades were "impressed by the testimony . . . received that most, if not indeed all, employers would be glad to have fixed a minimum rate of payment and conditions below which neither they nor their competitors should be allowed to go " (p. xviii).

Innes, England's Industrial Development, 1912, p. 320. "The difficulty of experiment in this direction," he points out, "lay partly in the immediate loss of trade entailed upon the innovators. At the end of the first twelve months possibly, and at the end of the second probably, a ten hours' output would have exceeded the old twelve hours' output. But some time would elapse before the increased efficiency made itself felt. For the first six months the ten hours' output would probably be definitely less. During that time the reforming house would be losing a certain amount of trade, especially when large orders were coming in which could not be executed without working overtime. The long-hour houses would secure the orders and the consequent connection. Thus it remained a real solid fact that masters could not afford to act upon the new principles independently, though the universal adoption of those new principles might be of advantage to the whole trade. A few recalcitrants could wreck any movement that was not universal and could not be enforced by law."

mediate result of working short hours. In addition, it may well be true, as Miss Martindale and other inspectors suggest, that "factory law has fostered a sense of responsibility for the welfare of workers that makes employers go beyond the requirements of the law." 2

Let us glance now at those who have from time to time reached the next stage.

The theory that "it pays" to give good working The theory conditions is considered modern, and somewhat that it pays to give good American in its origin; yet it may be met with working conamong English manufacturers of a century ago, and ditions is not of recent English employers have, from time to time through-origin out the century, attempted to work upon this theory. Dale, whose factory was the model in 1792,3 "gave his money by shovelfuls" to his employees and found that "God shovelled it back again." 4 Owen bore witness to the financial success of his experiments at New Lanark and, by 1835, Edward Baines, whose bias was towards the masters, remarked, "I believe the conviction is strengthening and spreading, that it is eminently the interest of a manufacturer to have a moral, sober, well-informed, healthy, and comfortable body of workmen." 5 In 1848, P. R. Arrowsmith, 1 master-manufacturer who had provided gardens and a library for his workpeople, stated, "I believe that, in a merely pecuniary point of view, I am repaid by having better and more willing workmen." 6 And about 1852 a director of a London company, whose conspicuous prosperity has continued to the present time, declared, \*Speaking as a Director, I would

<sup>&</sup>lt;sup>1</sup> See note, p. 39.

<sup>&</sup>lt;sup>2</sup> H.M. Senior Lady Inspector of Factories. Paper on Tygiene and Industrial Employment read at the Congress of he Royal Sanitary Institute at Belfast, July 24-29, 1911.

<sup>&</sup>lt;sup>a</sup> Annual Register, 1792, p. 27 of the Chronicle.

Alexander Cullen, Adventures in Socialism, 1910, p. 19. Edward Baines, History of Cotton Manufactures, p. 484.

Reports, vol. xxiii., 1849, p. 149. Horner quotes Arrowsmith, lug. 30, 1848.

## 46 EMPLOYERS' ATTITUDE TOWARDS

impress upon you my own firm conviction that the school system which we, as Directors, recommend is highly conducive to the pecuniary success of our business." 1

but is of recent development.

It would seem that this idea of financial return for improvements in working conditions has grown stronger and stronger, until it sometimes threatens to exclude all question of feeling. Just where the line must be drawn it is impossible to say, but it is certain that the movement towards better conditions has been hastened both by the theory and the fact that "it pays". To-day "the economy of high wages . . . the moral stimuli of hope, and an intelligent outlook upon life" 2 are recognised in circles where "Directors feel themselves to be trustees for the shareholders and morally bound, as such, to sacrifice philanthropy to gain." 3 "Profit-seeking itself" seems to be leading "great manufacturing concerns to adopt measures within their works which will both benefit their people and directly . . . or indirectly . . . accrue to the employers' benefit." 4

Not only is the economy of high wages recognised,

but Welfare Work may help to maintain industrial peace, Further, as one of the first English factory inspectors pointed out more than sixty years ago, "something more than payment of wages is necessary to establish that friendly feeling towards the master on which the security and well-being of society so much depend," and to-day, when "the nerves of the business world are growing weary of the strain of competition, . . . the human craving for security is one of the chief forces that are transforming industrial organisation." 6

There is a desire for peace; and there is a positive

<sup>1</sup> Vide Article I., Quarterly Review, Dec. 1852 (quoted in Appendix V).

<sup>2</sup> J. A. Hobson, Work and Wealth, 1914, p. 124. <sup>3</sup> W. J. Ashley, Economic Organisation of England, 1914,

p. 179. 4 *Ibid.*, p. 180.

Horner's Report, p. 11, in Reports, vol. xxvi., 1847-48, p. 163.

• Ashley, op. cit., p. 187.

belief in the profit to be derived from good conditions. And so under the name of "Enlightened Self-Interest" if the there appears before the workers something sus-workers can piciously like what the best of them have learnt to vinced that dread under the name of "Philanthropy". They thropy have been told that they and "they only can raise not the their own condition," and they have begun to motive force. believe it, to welcome improvements enforced by law or by Trade Unions, and to question each suggestion made by interested employers. The ghost of the "economic man" still haunts the realm of industry; employers are believed to be purely selfseeking, and if their actions appear humane they are open to suspicion. "Enlightened self-interest" may be a sufficient explanation for the capitalist; but it does not satisfy the labourer, who fears the self-interest of the employer in whatever guise. At this point we reach the parting of the ways along which employers pass, and the divergence must be carefully examined, for it is slight at first, and the ground traversed is very similar. It is the direction which is important, not the immediate surroundings.

Few will now deny that industrial legislation Since inhas benefited the nation, both sociologically and dustrial legislation economically. From the national point of view, the benefits the fact that, because Welfare Work pays, there is no the fact that longer a tendency for the best employers to fear their welfare rivals presents a danger, because it destroys the Work pays motive which formerly made them desire legislation. in so far as This danger is not new; it is merely increasing it destroys Robert Greg, whose elevation to the peerage was the motive which makes suggested by Lord Shaftesbury,2 in recognition of his employers

legislation.

<sup>&</sup>lt;sup>1</sup> Edinburgh Review, 1849, pp. 417-29. "To themselves alone must they look for their elevation in the social scale." It is frequently forgotten that the most public-spirited of the workers have no desire to raise themselves in the social scale; their desire is for the shortening of that scale by raising the bottom of it.

<sup>&</sup>lt;sup>2</sup> Lord Shaftesbury's Life, vol. ii., 1892, p. 302.

#### EMPLOYERS' ATTITUDE TOWARDS 48

a national danger. This danger is not new.

generous treatment of his workpeople, was a strenuous opponent of factory legislation in the early days.<sup>1</sup> "It was difficult for him, with his antecedents, to believe that the capitalist could ever wield his power otherwise than honourably and with due consideration for his workpeople." 2 Yet who can doubt that he was mistaken? Horner, whose zeal in the cause of factory workers none will dispute, wrote in 1845,

"If the interests of the masters and workmen go together there is no occasion for law"; and so he, too, was opposed to "a further legislative restriction of

and was clearly foreinspectors.

the hours of labour." 3 In the light of after events his colleague, Robert Saunders, appears wiser. "The seen by some advantages invariably resulting to the millowners early factory themselves," he wrote, "ought to be sufficient to induce others to adopt similar plans, but experience proves great difficulty to exist in persuading persons to change their ordinary habits, especially when the least additional trouble or expense is to be first incurred for a prospective advantage, the value of which they cannot fully and correctly estimate. While this

> difficulty requires that a law, to ensure reasonable protection to the young, and comfort and security to all, should be strong and firmly enforced, [it] also makes it very desirable that every encouragement be offered to the exercise of humane and charitable feelings." 4

It is increased by the employers estrit de corps,

The danger which Saunders foresaw in the inertia of inferior employers is emphasised by the present practice of some exemplary employers. One who had provided dining-rooms, baths, and rest-rooms for his employees, writing in 1914, said that he was anxious that what he had done should not be made public, lest it should become a standard for less fortunate

<sup>1</sup> Vide R. H. Greg, The Factory Question, 1837.

<sup>3</sup> Vide Appendix II. 4 Reports, vol. ix., 1836, p. 166.

Wide Memoir in 1891 edition of W. R. Greg's Enigmas of Life, p. xxxviii. Though written about W. R. Greg, the words appear even more applicable to his brother, Robert Greg.

employers.1 Similarly, in 1903, an employer, who required only forty-eight hours' work a week from his workers, and considered the reduction of hours profitable to the manufacturers, was an extreme opponent of legislative interference.2 Here and there one finds an employer advocating further legislation. But it is a delicate task! "It is all very well for you," say other employers; "you can afford it! But what about us?" The best employers give conditions far beyond what any law could at present enforce. They say "it pays," but their brother-employers are still sceptical, and at any rate object to being coerced. An employer must indeed be public-spirited to agitate for a law which at one blow would deprive him of an advantage over his rivals and of a pleasant sense of virtue. There are such public-spirited employers, but they cannot be considered typical, any more than Owen or Fielden, in the fight for the principle of factory legislation, can be considered typical of their times. Esprit de corps and self-interest co-operate to prevent progressive employers from urging the public to take steps to reduce their beneficent provisions to the level of mediocrity by means of legislation. Whereas formerly the good employer merely marked out the track for legistation, and asked that the law should safeguard his progress, now, with the growing conviction that pecuniary loss will not dog his footsteps, he casts no glance behind, and recks little what is decreed by law. No more responsibility for safeguarding the workers' interests can be attached to him than to any other citizen. • His attitude becomes a potential

<sup>&</sup>quot;We do not . •. . court publicity in any way, nor should we wish our efforts to be held up as a standard to some less fortunate concern who could not afford to go as far in this direction as ourselves. This must always be a question of how far means will allow."

<sup>&</sup>lt;sup>a</sup> Hutchins and Harrison, History of Factory Legislation, 1903, p. 198.

whose attention. the best employers,

from the worst.

Inspectors alone are powerless.

Hence, it falls to the employers as a class to modify the existing system;

and, also, by menace only when it is regarded in conjunction with the attitude of the public. A real danger, for which employers cannot be held responsible, seems to be attracted by that the forward movement may sweep on, attracting public attention, while no one casts a glance at the bottom of the industrial system, where employers merely fulfil the minimum regulations of the law, is withdrawn which are dangerously low. For example, so many employers provide drinking-water and wash-bowls for their workers that those who refuse to do so escape public comment. Again, two five-hour spells per day are not common in the best factories. Yet in non-textile factories they are permitted by law and quite frequently worked. Only the workers feel the weariness involved, and they, turning to inspectors for redress, are told that they have no legal cause for complaint.1 The public does not know the hours worked or, if it knows them, it does not understand the strain that is involved. It is left then, in a large degree, to the employer to determine any modification. But is it safe for the nation to rely upon one class to determine the conditions of work for another class? employer who has successfully undertaken many schemes for the welfare of those whom he employs utters a word of warning. "The employer as such," he says, " is not primarily interested in keeping labour in excellent condition. What he wants is a sufficient supply of efficient labour to meet his immediate demands; and, though ultimately this supply will be curtailed unless the whole nation allows a margin for

> <sup>1</sup> Indeed, the position with regard to hours is not simple. The normal Legal Hours for Women in Factories are as follows: Monday to Saturday. Weekly Length of Spells. Friday. Total.

> Textile Factories . 10 Non-textile ,, . 10½ But though the hours which are legally permitted are longer for non-textile than for textile factories it would appear that, as a matter of fact, contrary to what might be expected, the workingday is commonly shorter in non-textile factories.

wear-and-tear and for the stimulation of progressive efficiency, he cannot afford, under our present competitive system, to take a very long view. He can act with others, but not much in advance of them. In so far and this then as he represents immediate and limited, rather may be dangerous to than ultimate and general, interests, his economic the nation. Outlook must stand in marked contrast to that of the nation as a whole." It is for the nation to safeguard its own interests, and perpetual vigilance is necessary.

1 The Way to Industrial Peace, 1914, p. 66.

### CHAPTER V

### WELFARE WORK AND THE IDEALS OF THE WORKERS

Workers fear Welfare Work,

(1) lest individual advantages loosen class ties. and so in the struggle for their ultimate aims.

THE fears which disturb the sincere champions of the working class are twofold. They fear an easy content, and they fear charity. "They suggest that Welfare Work at its best tends to make individuals content with their lot, and callous as to the lot of their fellows; and so to weaken the social instinct which is humanity's natural safeguard. The fact weaken them that Welfare Work is said to pay both the employer and the employees suggests the possible development of a contented community within a discontented state. Once let an employer completely solve the difficulties in the relation of capital to labour and he can reign supreme. He will possess the fulcrum from which to move the industrial world; and, though he be the kindliest despot imaginable, he will be a despot none the less. Only when "the employer" becomes identical with the whole people whether considered as State, as consumers, or as producers) can industrial content be regarded as an inmixed good—if, indeed, then.1 The right to

> "It can never be said that the interests of employer and employed are absolutely identical," says an employer (Is dustrial Irganisation, 1912, p. 272). Does it follow that there is a necessary conflict of interests between employer and employee? In this lebate two opposing tendencies of thought have manifested themselves in Europe and America. The economists, Bastiat in particular, emphasise the harmony of interests; and there is a harmony of interests, since both workmen and employers ive by production. The socialists emphasise the conflict of

# WELFARE WORK-WORKERS' IDEALS 53

grumble must be maintained till there is no cause for complaint, and the friends of labour are apt to regard with some dismay sporadic cessations of grumbling, which suggest suppression of symptoms, rather than complete health. Industrial content is so far off, that such a menace is but dimly recognised and excites little public sympathy; but the employer But Welwho would really promote the welfare of the workers fare Work need have no cannot afford to ignore their gropings towards a such effect; corporate ideal. Trade Unions, however inadequately, represent their attempts to serve self through serving others, and loyalty to a Union may well be the expression of a fine social instinct. Émployers who disregard it may sometimes, perchance, obtain immediate tranquillity, but it is doubtful whether the nation's interests are thus best served. To keep alive the spark of "divine discontent" may be no it does not mean part of true Welfare Work.1 Here and there presuppose one finds an employer who is genuinely pleased when peace, his workers make demands upon him, even though it appear impossible at the moment to grant their requests. Whether a strike for an unreasonable demand is a worse evil than an unreasoned submission to existing circumstances, may be open to continual question; but the employer who is sincerely ininterests, and this manifests its real existence in the disputes over the distribution of the product. But when the facts are dispassionately examined it becomes apparent that in a great majority of cases the conflict is occasioned by passion and prejudice rather than by a rational self-interest (T. S. Adams' translation of *The American Workman*, by E. Levasseur, 1900, pp. 465-6). In the last analysis employers and employed are one, or a least may become so; but while one nation toils for another nation, or one class works for another, interests are not identical. Even when there is no class distinction, as in the case of Co-operative Societies, the interests of workers as producers and of workers as consumers appear to clash.

1"Improved conditions of labour in factories, fencing of machinery. . . abolition of nightwork for women and children, better provision of sanitary conveniences, . . and better education generally have done much to raise the working classes to a higher platform of comfort as well as to one of discontent" (Sir Thos, Oliver, Diseases of Occupation 1908, pp. xi-xii).

nor is it incompatible with Trade Unionism.

terested in the welfare of his workers aims at neither peace, nor strife, but understanding. He is anxious to discuss vexed questions with the workers, and to elicit their true opinions. To this end, welcomes their chosen spokesman, whoever he may be. An English employer, well known for his Welfare Work, writes in reference to this matter: "It is important, with the increasing distance between employers and employed, that full opportunities should be given to the latter for voicing any grievances, and that there should be a sympathetic investigation of their complaints. In this connection, I can see no reason why employers should not recognise Trade Union officials as representatives of their men. It is not fair to expect an aggrieved worker—perhaps in a very subordinate position—to speak out before a meeting of directors on his own behalf, with the risk that his action may be mentally registered against him by his foreman, and injure his chance of promotion later on. His official representative could more openly and on a more equal footing discuss the point at issue, saving the employer not only the trouble of piecing together his information from the timid and partial evidence of men in fear of him, but helping him to remedy existing grievances before they have grown into full-blown issues of dispute." 1

On the whole, the attitude towards Trade Unions of employers who definitely undertake Welfare Work seems to be more conciliatory than that of employers who enter on profit-sharing or co-parenership schemes.<sup>2</sup>

1 The Way to Industrial Peace, 1914, pp. 93-4.

<sup>&</sup>lt;sup>2</sup> "Those employers who enter on profit-sharing are averse to participation by their workmen in Trade Unions, and indeed sometimes adopt profit-sharing with the design of counteracting the Union movement. The Unions, on their part, are opposed to profit-sharing, or at the least suspicious of it, because it tends to make the workman interested chiefly in the welfare of his

Welfare Work emphasises the common human interests of all; profit-sharing as such merely endeavours to unite economic interests which are. as matters stand, or may become, strongly contrasted. Welfare Work permits and encourages recognition of the workers' attempts at self-help, and falls into line with them. To a certain extent co-partnership and It disprofit-sharing tend to emphasise individual service tinctly differs from and individual recompense. Welfare Work, in its profitbest forms, emphasises personality, but merges in-sharing dividual interests into the common interest of all. One and all benefit by the provision of good work-, rest-, bath-, or mess-rooms. Public spirit in its simplest form is developed; the workers learn to say not "mine" and "thine," but "ours"; and a true solidarity of labour is fostered, though perhaps in a somewhat homely and restricted form. There is danger lest the solidarity be limited to the single firm or company, but this should be readily overcome by Trade Unions, with which employers who undertake such Welfare Work are usually very willing to co-operate.1

That, as far as co-partnership is concerned, the and co-workers' fears are not groundless is shown by state-partnership. ments of employers to such effect as the following: "We know nothing about strikes... but we had, in the recent strike at Liverpool, men who were determined that the Company's work should go on, and who, at great personal inconvenience to themselves, got our goods forwarded, or by working late at night got our goods shipped on rail to catch a steamer at Hull, where there was no strike at that immediate fellow-employers, not in all workmen of the trade or locality" (F. W. Taussig, *Principles of Economics*, 1915, pp. 202-2).

There are many employers who put into operation schemes intended for the welfare of their employees who are strongly antagonistic to Unions; but they are rather of the patriarchal type and cannot be considered among the best examples in England.

particular moment, and where steamers could be found carrying to ports of destination of our goods. All these cases I insist upon having reported to me, ... and in all these cases I give the man an increased number of partnership certificates, according to the services he has rendered, over and above what he is entitled to have." 1 High-spirited workers naturally resent being given what they are not "entitled to have"; their demand is for their due.

In a certain sense Unions themselves are responsible for the rapid development of Welfare Work; it is often a tacit recognition of their power,2 and they would do well to recognise it as such and endeavour. to guide it along lines which will best serve their ultimate ends.

Workers

fear Welfare Work (2) because they suspect Philanthropy. But Philanthropy is fot Welfare Work.

Welfare Work is giving a wider meaning to the idea of employment.

"Welfare" programmes, to be permanently successful, must be so carried out as to be consistent with the independence of the workers, both political and economic,3 and, further, they must be recognised by them as in harmony with their social aspirations. The employer who hopes to create feelings of gratitude in the hearts of his employees is doomed to disappointment, not because the workers are incapable of gratitude or fail to recognise his efforts, but because they do not desire charity, but justice. Their hope is in a widening out of the idea of social justice. "There are two aspects of the welfare movement which always commend themselves," says Professor D. H. McGregor. "In the first place

<sup>1</sup> Co-partnership, 1912, p. 20. \* Re Welfare Work, Professor Taussig says: "The increasing adoption of methods of this soft is in part but one manifestation of that growth of altruistic feelings which . . . underlies labour legislation and the whole movement for social reform. In no small degree it is due also to pressure from labour unions. The fact that workmen are formidably organised makes it pay to minimise discontent. . . . Development in this direction, at all events, seems more likely to take place than that of profitsharing in the strict sense, and it promises more for industrial peace in the future " (Principles of Economics, 1915, p. 310).

W. J. Ashley, Economic Organisation, p. 180.

there is the idea that the solution of some part at any rate of the industrial problem can be found by actual development of the conditions of work, that industrialism can solve some of its own problems by giving a wider meaning to the idea of employment. Just as in recent times the idea of education has been extended so as to include not only instruction but physical training, medical attendance, the feeding of children, the provision of play-centres, and home visiting, upon all of which public funds may now be expended in the name of education, so the idea of employment is being extended from the mere payment of wages for attendance in a factory so as to include responsibilities for health, recreation, and housing. A large part, that is to say, of the social Through it problem is being attacked through industry, which industry is evolving a is seeking, step by step, to evolve a higher idea of higher ideal itself; personality is to be approached through that of itself. gate no less than by teaching ethical or moral or religious ideas of life; and whatever objections may be made from the point of view of democracy to the philanthropic nature of such schemes will become less and less as the idea of employment, like that of education, is felt to involve in its very nature this wider endeavour." 1

In short, anything beyond what is actually just in the reward of labour creates a suspicion of charity; what is desired is that good working conditions and personal consideration be recognised as a part of the workers' due. Without public (perhaps even legislative) recognition of an employer's responsibility it is difficult for any employer who assumes that responsibility to escape entirely the suggestion of philanthropy or of ulterior motives. Yet, unless some employers take the first steps, it is doubtful whether the law (or even Trade Unions) would be able to move forward. To what extent it is safe to dispense with the support of

<sup>&</sup>lt;sup>1</sup> D. H. McGregor, The Evolution of Industry, 1911, p. 143.

### 58 WELFARE WORK—WORKERS' &DEALS

legislation cannot be determined; it is a matter for the careful consideration of both Trade Unions and the general public. Experience seems to suggest that the public opinion, created by experiments of various employers, should, in the interests of the nation, receive the stamp of authority from the Legislature as speedily as possible.

In conclusion, it may be said that, far from being a "sleeping draught" for the workers, Welfare Work in its best forms encourages their aspirations, and stimulates in them desires for better conditions and more adequate opportunities of self-realisation.

### CHAPTER VI

### THE WELFARE DEPARTMENT

We have seen that progressive employers have paved the way for industrial legislation, and exert a continual influence upon the standard of conditions in factories. We may now consider how, as the number of their employees has increased, they have endeavoured to As a busiadapt industrial organisation so that the individuality ness grows,

of the workers may not be ignored.

The employer has gradually lost all personal contact with his men. In many cases the "employer" is no longer a person, but a company consisting of many persons otherwise unconnected with the business. Formerly personal intercourse was the basis of the relations between master and man. Now that foundation is shattered. The duties of the specialised old employer have been delegated to separate in-departments take dividuals; different departments have been created over the —a buying department, a selling department, and, various let us say, one or more manufacturing depart- the em-His recognised business functions have ployer. been divided, and the specialised work entrusted to departmental managers. At first no one seems to have thought of the care of the workers as a definite duty of a business man; its execution was left to chance. Two distinct motives, however, have led to specialisation in this respect also-the Humanimotive of pity and the motive of profit. Un-tarian and commercial doubtedly the former has been the more powerful considerain England; the latter, it would seem, is the only tions,

one tolerated in America. A middle course is certainly gaining ground here, as experience shows that consideration of the worker is actually beneficial to the employer. "The human factor still plays a great part in even the most automatic processes, and even from the point of view of profits it pays to treat human beings as such. . . . Welfare Work' is not only a means of satisfying the humanitarian instincts of employers, but is also a commercially successful device for improving the efficiency of business. . . . The evidence on the whole goes to prove that there is a distinct monetary gain both to employers and employed from wholesome conditions in the factory and from attention to the physical fitness of the operatives." 1 The English workman may be content that his employer should profit by treating him well; but that he should treat him well only for the sake of profit would not be tolerated.

above all an appreciation of

ployers to establish Welfare Departments,

Neither "pure business" nor philanthropy is the prevailing motive in England. It is not even a mixture personality, of the two; it is a recognition of personality. Appendix V is given, at length, an account of how, in the middle of last century, the manager of a company, at his own expense, established a special department to look after the welfare of the workers. induced em- Having demonstrated its good effect, he succeeded in persuading the directors to carry it on; and, to this day, there linger signs of his personal influence. He was an enthusiastic member of the Church of England; the man he selected to look after the workers was a clergyman; and the company still retains a chaplain. A more normal development of a Welfare department appears to be that illustrated in Appendix VI, wherein the employer and his wife kept up their personal relations with their employees as far as possible, and engaged, first a man, and then a woman, to help them as the task outgrew

<sup>1</sup> W. T. Layton, Capital and Labour, 1914, pp. 115-6.

their powers. Private firms, or at any rate private to study companies, seem readier to interest themselves in working their employees than public companies; and, in spite with a view. of the general belief to the contrary, it seems that improvemen who have risen from the ranks are not the least ment. anxious to treat their employees well. At any rate there are conspicuous cases in which employers, as they have risen, have raised the standard of comfort for their workers. In several cases where a woman has been associated with the business from its inception her influence has been a benefit throughout. The "most delightful workroom to be found" in a boot and shoe factory in England, for example, is said to owe its comfort entirely to the manager's sister, who was in charge of it for many years. When a woman's influence is exerted merely from the outside of a factory, it can prove far from beneficial; but the influence of a thoughtful woman actually in the factory is of inestimable benefit. When women trifle with serious business they are worse than useless; but fortunately many are now proving their worth by earnest work. One woman who was engaged by an employer merely to care for the welfare of the girls has recently been appointed one of the managers.

If large firms often appear more considerate of Large firms their workpeople than smaller ones, this should not could improve immediately be attributed to a lack of sympathy and working understanding on the part of the small firm. It is conditions more easily largely an economic question. If a firm can afford than small one-half per cent. per annum on its turnover for ones; improving conditions, it will make a great deal of difference whether its turnover be £10,000 or £1,000,000. Even if the number of employees be proportionate, the benefit will be quite out of proportion. £5 per annum might suffice for the provision of first-aid cupboards; £500 would provide a rest-room, and medical attendance, with cupboards enough and to spare. But the same

percentage of the turnover will probably provide a larger sum per employee in a larger factory; for the ratio of the number of employees to the turnover is increased by any inability to provide specialised machinery. Everything indicates that, though Welfare Work may pay when carried out on a small scale, it pays better when the scale is larger.

Further, the firms do not compete on equal

but, with financial success

and growth

an under-

employers

and employed

taking, the gulf between

terms in the world's market; and as, in both cases, profit is the primary business consideration, the firm which cannot afford to admit any secondary considerations is likely to appear harsh to its employees. It is not wise to dogmatise in this connection, but with financial success employers undoubtedly tend to become estranged from their employees, and if "not what we give but what we share" be the measure of generosity, the honours would often be with the smaller firm. Financial success is not necessarily proportionate to size, but inevitably, with in the size of the growth of an establishment, an employer moves further from his workers. Here and there a man, distressed that this should be, clings desperately to the traces of personal relations which remain. It is rather a pathetic sight, for he grasps but a shadow of the past.

widens. Hence arises the need for a Welfare Depart-

ment.

A wiser course is chosen by the man who faces the facts. Recognising that the task which the employer once performed has now outgrown the capacity of any individual, he delegates to others the duties of each integral part of the business, reserving for himself only the responsibility for co-ordinating them. All is changed; nothing is lost. The captain of industry overlooks nothing. The bargain which was made over a bottle of wine is replaced by the contract of a Sales Department; and the personal interest of the employer in his workers by the activities of a Welfare Department.

At first the officers of this department were

merely persons at leisure from other duties, with no special training, and no specified functions. Now the office is becoming more and more definite and men and women are specially trained for the work. Welfare Departments are becoming increasingly common in English factories. "The number of employers who look upon the payment of wages as The advana complete fulfilment of their responsibilities for the tages of such welfare of their operatives is probably smaller than ment are is generally thought, and the reports afford evidence both by emof an increasing desire on the part of factory occupiers ployers to improve the general condition of their workers." 1 This desire is not entirely disinterested; for, as Professor Pigou points out, "there can be little doubt that, under a policy of this sort wisely carried out, a given sum of money will react more forcibly on the quality of workpeople than it would do if simply handed over to them in the form of coin."2 Recently the utility and desirability of Welfare and by the Departments has received official recognition; and Government. in 1913, by Regulations,3 the Home Office adapted the idea, and made the appointment of what may be called a Welfare Secretary compulsory in the Potteries. An officer must be appointed by the employer to supervise the conditions of the factory so far as they concern the welfare of the workers. Such an officer is generally called a "Works Inspector." He is appointed and paid by the employer. This development is of such recent date that it is

Factory Report for 1914, p. 31.

<sup>&</sup>lt;sup>2</sup> Pigou, Wealth and Welfare, 1912, p. 10. <sup>3</sup> Vide Appendix KI. Compare the "entirely new departure" made by the Coal Mines Act of 1872, "in the six sections relating to daily control and supervision of every mine by a manager holding a certificate of competency from the Secretary of State, after examination by a board of examiners appointed by the latter, power being retained to the Secretary of State to cause inquiry, if necessary, later into the competency of the holder of the certificate, cancellation or suspension of the certificate being possible in case of proved unfitness" (Miss Anderson, in Oliver's Dangerous Trades, 1902, p. 38).

not possible to say what its results will be. Opinions

are conflicting. Miss Anderson says, "The potters'

self-inspection . . . so far has not proved very

satisfactory or intelligent"; but the cases of lead-

poisoning were just half as many in the first seven

64

Experts differ in estimating the success of the recent Pottery Regulations.

Much undoubtedly depends on the official carrying them out.

months of 1914 as in the corresponding period of 1913.2 The difficulty seems to be in getting suitable people appointed. As another inspector points out, "Some manufacturers, who have tried seriously to carry out the spirit of the Regulations, have appointed really competent men as their works inspectors. Such factories have improved wonderfully since the Regulations came into force. On the other hand, many manufacturers have appointed a man without giving any thought to his capacity, suitability, or other duties. These men, as a rule, display ignorance of the Regulations for the observance of which they are responsible; they are sometimes unable to ensure the enforcement of any instructions they may find it necessary to give; and, not infrequently, are so overloaded with other duties that the carrying out of the fresh duties imposed by this regulation is a physical impossibility." 3 Clerks, warehousemen, commissionaires, and ex-navy men have from time to time filled the position of Works Inspector. Possibly foremen predominate, but they have not always proved particularly successful; a fact which is attributed to "their natural desire to preserve the old order of things." Sometimes a junior member of the firm has been appointed Works Inspector, and such appointments seem to have met with success. The Works Inspector appointed under the Pottery Regulation 4 has certain especific duties; he must "see to the observance, throughout the factory, of the Regulations," and "carry out systematic inspection" of their working; he must keep a daily

<sup>&</sup>lt;sup>1</sup> Factory Report for 1914, p. 53. <sup>2</sup> Ibid., p. 70.

Vide Appendix XII. \* Ibid., p. 74.

record of all breaches of the Regulations and the steps taken to prevent their repetition, and he must certify weekly that he has carried out the duties entrusted to him.1 It might be well if something of this definiteness could be extended to a few of the voluntarily appointed Welfare Secretaries, though others are as methodical in their ways as the most exacting could desire. There is, of course, no limit to the work which may be added to that of a Works Inspector. Provided he fulfils the duties set forth in Regulation 27, he may attend to anything else that he or his employer may desire. In a large pottery, though, little time will remain after carrying out the "systematic inspection" enjoined upon him. He must know of the health of the The extenworkers and the hours of their employment; he sive influence of Welfare must arrange for their periodical medical examina- Secretaries tion, and be sure that no women or young persons undertake prohibited work; he must satisfy himself daily as to the use of overalls, head-coverings, and respirators; he must see that cloak-rooms, messrooms, and lavatories are in good order, and must attend to many details in the workrooms themselves. Ventilation, suppression of dust, temperature, the state of the floors and benches, even the materials used, are under his care. It is not surprising that the whole of his time is occupied in many of the larger potteries; the wonder is that this is not always so. The same person is sometimes appointed as Works Inspector to two or more factories—an arrangement which can scarcely be considered satisfactory, but is not contrary to the letter of the Regulation.

Work of this nature, whether it be undertaken by a pottery inspector under the Home Office Regulation or by a Welfare Secretary in another makes great trade, demands great tact. Deep-rooted prejudices care in their selection

desirable.

valuable assistance.

of both employer and workers have at times to be contended with, and there are always untrodden paths to be tried. Factory inspectors attach great importance to this office. Miss Martindale, H.M. Senior Lady Inspector of Factories, in 1911 spoke of "the appointment of social helpers or, as they are sometimes called, welfare workers" as what she personally regarded the most important of all forms of Welfare Work. "More and more," she said, "am Experienced I persuaded of the value of a woman's insight in the women often arranging for the welfare of workers, and I must confess at times, when I am inspecting a factory, I find myself wishing that the employer's wife would also inspect it, as benefits for women workers would, Iam sure, be the result of her visit." "In a number of factories now," she added, "educated and highly trained women have been appointed. . . . Speaking from my own knowledge, I have found inestimable benefits accruing to the workers in factories where these appointments have been made." 1 one of H.M. District Inspectors, who had considerable knowledge of the working of the Pottery Regulation, in reference to the appointment of Works Inspectors said, "The resulting improvement in conditions of potteries is certainly not confined to those previously maintaining a high standard. More than threequarters of the occupiers one meets are anxious to comply fully with the requirements, and this Regulation provides the machinery for reminding them of what is needed without waiting for the next quarterly visit of H.M. Inspector."

The very varied duties which attach to the office of Welfare Secretary are discussed in considerable detail in subsequent chapters. A summary given by Miss Martindale may suffice for the present.

"As the representatives of the directors," she

<sup>&</sup>lt;sup>1</sup> Paper on Hygiene and Industrial Employment, at the Congress of the Royal Sanitary Institute at Belfast, July 1911.

says, "the social helpers are expected to suggest and advise upon any improvements in conditions of work, etc., that may be helpful; to initiate and control any extensions of social work that may be determined upon; and to assist in keeping the personal element prominent in their relations with the employees. As the representatives of the employees it is the duty of the social helpers to be constantly in touch with them, to gain their confidence, to voice any grievances they may have either individually or collectively, to give effect to any reasonable desire they may show for recreative clubs, educational classes, etc., and to give advice and assistance in matters affecting them personally or privately." 1

Some or all of these duties are carried out by men Difference and women differing from each other, in ideas and in the education, even more widely than Works Inspectors. experiences Clergymen, teachers, organists, doctors, gymnasts, of Welfare overlookers, cooks, ex-constables are some of those accounts for who are found engaged in the work. Such variety in much variety in variety in personnel is bound to produce variety in practice. is difficult to find anything common to all the systems. done. Perhaps the only trait which may reasonably be ex-Only a repected in all schemes which profess to be for the cognition of the worker's benefit of the workers is a recognition of the indi-individuality viduality of each worker. That is the keystone in is common to all the arch of Welfare Work. At a time when practical schemes, psychologists in their laboratories are busying themselves with studies of differences between individuals, practical manufacturers are recognising the importance of such differences and are empirically adapting their arrangements in accordance with them.

It may at first glance appear strange that the distinguishing characteristic of a system of "common" schemes should be the recognition of differences; but further consideration will reveal the fact that

It the work

<sup>&</sup>lt;sup>1</sup> Paper on Hygiene and Industrial Employment, at the Congress of the Royal Sanitary Institute at Belfast, July 1911.

"common" provisions, used (at will or at need) by individuals, produce endless variety. A doctor is provided for all: each avails himself of his services in a different way. From a library, open to the workers in a factory, scarcely two will choose exactly the same books. A Welfare Secretary may be at the service of every employee; no two will make the same demands upon him. "In practical life we never have to do with what is common to all human beings, even when we are to influence large masses." 1

and this is essential for success in numbers.

large

Industry has, at least to some extent, passed through the phase in which a group of workers was looked upon as a mere multiple of a single worker. It is recognised that its members have duties, rights, and desires, as a group and as individuals. To adjust dealing with these is a task too delicate to be left to spare moments or the chance interest of the employer. It is gradually becoming recognised as the business of an expert, though it must not be forgotten that the one indispensable quality for its successful accomplishment is tact. We have seen that legislation has followed close upon Welfare Work, even up to what may be considered the last step, namely, the appointment of a special officer to look after the welfare of the workers. The law is continually encroaching upon what has been deemed the province of the individual employer. But this serves only to give direction to the movements of the individual; it does not limit him, for to the possible ways of caring for the welfare of a group of men and women there are no limits. It betokens a narrow view of the possibilities of a Welfare Secretary to say that, if regulations enjoin certain duties, they restrict his or her sphere of influence. It is true that the essence of Welfare Work is its individuality; but individuality is not necessarily marred, but may even be enhanced, by the emphasis

<sup>&</sup>lt;sup>1</sup> H. Münsterberg, Psychology and Industrial Efficiency, 1913, p. 9.

of certain common qualities. Just as the establishment of a recognised maximum for the working day rendered possible further experiments in shortening hours, so each advance of the law strengthens the foundation upon which individuals may build. Welfare Work consists of the voluntary efforts of employers to improve conditions of employment. The matters with which it deals may change; its methods may alter; but it remains essentially the same. At the approach of law it moves further towards the ideal,

"That, like the circle bounding earth and skies, Allures from far, yet, as we follow, flies."

### PART II

## INTRODUCTION

In the development of industry which led to the Personal establishment of colossal factories with thousands of relations between emworkmen and companies of employers, personal ployer and relations between employer and employee almost are no longer entirely passed out of existence. The workers doubt-possible. less lost much directly as a result of this; their comfort was no longer a matter of personal responsibility to anyone, and the human touch, which produced consideration on one side and loyalty on the other, was no longer felt. Indirectly, however, through their enforced resistance to an impersonal master, they gained class personality, class consciousness, and class loyalty, which rendered possible the formation and the development of the Trade Unions of to-day. Meanwhile, the employer often lost the trust and affection of the workers, and gradually it was realised that the loss was not inconsiderable. Crude attempts to remedy it were made from time to time; certain employers looked after their employees en masse with a consideration which might have been passively appreciated a century before. But the workers thought such overtures masked an attempt to rob them of their hardly acquired class personality, and their halfachieved independence. They branded them "Pater-To avoid the nalism," and refused to be treated as children. "Paternal-

1 "The great advance in the study of hygiene during the ism," the cry last half-century has been responsible for a good deal of legis- was raised,

Then it was, to appeal to their adult powers of reasoning, that "Efficiency" became the cry, and Welfare Work was presented as a necessary part in the progress of making a business efficient. Such books as N. A. Brisco's Economics of Efficiency may be said to indicate the attitude adopted. "It pays! pays!" is the cry, and the cry, it would seem, appeals to the American more readily than to the English workman; or perhaps it would be wiser to say that the English workman is more cautious and asks warily, "Whom does it pay?" American employers (according to such writers as Brisco) are out to purchase loyalty to the business. It is the "welfare of the business" that is their first concern.1 The British workman wants to know what is involved in devotion to the business. Does it mean a loss of personal freedom and initiative? If so, he will have none of it. A sceptical attitude on the part of the workman is not, of course, confined to this island. There have been strikes in America which are attributed directly to the well-meant paternalism of employers. But to the caution of the British mind is probably due the comparatively slow development of Welfare Work in England. If Brisco's attitude can be specially in regarded as typical of America, Welfare Work in America is as anti-philanthropic as may be. There is no question of the welfare of the worker as such; it is the "welfare of the business" which demands that workers be as fit as possible physically, mentally, and morally. Few workers should be "fired," because of "the loss arising from the introduction of new men." 2 All workers should be well treated, because

America,

lative action which is stigmatised as grandmotherly, chiefly because it descends to minute details, the importance of which is manifest to the expert, but not immediately at least to the lay mind" (A. D. Innes, England's Industrial Development,

<sup>1912,</sup> p. 353).

1 N. A. Brisco, Economics of Efficiency, pp. 72-121, <sup>1</sup> Ibid., p. 169,

"the contented employee has a positive money value." 1 It is a matter of dollars right through.

The British mind with its genius for compromise accepts the fact that "it pays," but looks at once for complications in the purchase price. Even if "it pays" the employer to buy the goodwill of his workers at any cost, is goodwill a thing which the workers can, with honour, sell, at any price? If it were merely physical health or mental ability that the employer desired to purchase, a bargain might be struck; but British workers look askance at Welfare Work lest it involve the loss of their birthright of feeling. It is for this reason that one of the English employers most conspicuous for Welfare Work emphasises the fact that he does not expect gratitude; and it is for the same reason that his well-intentioned efforts are scorned by many members of the working class. However it may be in particular cases, it is certain that Welfare Work in England arises from very complex motives, and one of them is a desire to benefit fellow-mortals. It would be absurd to say that this motive operates in all cases, and it would be equally absurd to say that all firms advertise their "good Some of the very best, judged by inspectors' standard, are almost unknown to the general public. Probably the most nearly universal feature of Welfare Work is that it is profitable in some way and to some degree; and it may be said that the American writers emphasise a dominant characteristic. Of thus emcourse, it must not be thought that each separate prominent branch of Welfare Work produces a financial return; feature of but as a rule the schemes most remotely connected Welfare Work, with immediate efficiency are only put into operation by employers who have already found a distinct advantage from simpler forms of Welfare Work. Education of a non-technical character given in works time is perhaps the high-water mark of altruism in

<sup>1</sup> N. A. Brisco, Economics of Efficiency, p. 191.

this direction, and the examples of it are few and far between.

which
assumes
a great
variety of
forms.

The name "Welfare Work" is applied in England to many schemes, differing widely in purpose and in execution, and the name is emphatically repudiated by many of those employers who devote much attention to the general and detailed welfare of their employees. In name there is no uniformity, nor is there any in practice. Building a palatial dining-hall, providing tooth-brushes, supervising daily fluctuations in wages, or teaching dancing—all are included in this vague and vaguely named attempt at making the workers better in some way, albeit there is no clear notion of a standard or ideal towards which progress might be made. But all varieties of this attempt deal directly with the environment of the workers or with the workers themselves, or are concerned with the relations of one to the other. The adaptation of the human element in production to its environment is of the utmost importance to a nation, whether wellbeing or material wealth be taken as the criterion of prosperity. Whether industrial efficiency be the test, or individual self-realisation, knowledge of the interaction of work and workers is needed.

Employers, acting from various motives, adopt various methods for selecting workers; it is necessary that these should be considered in their relation to national life, to see how far they are in accordance with its broader aims. What is profitable in any one factory may, when extended to all, be harmful to the nation. This aspect of the question is dealt with in the first chapter.

In Chapter II. an attempt is made to analyse the industrial environment and to indicate attempts at

improving it.

Chapter III. deals with the more general and obvious conditions of employment which directly or indirectly affect every detail of the workers' lives, and

form the subject-matter of most industrial disputes,

namely, wages and hours of employment.

Chapter IV. deals with those aspects of the workers' lives which are less obviously and intimately connected with a purely industrial organisation, so that Welfare Work in connection with them attracts special attention, from the public and from the workers. Incidental aids to physical well-being, mental development, and personal dignity are grouped together; current practice is examined; and an attempt is made to discover an underlying purpose and to suggest a course likely to be followed with good effect.

The concluding chapter deals with the duties of the Welfare Secretary and the functions of the Welfare

Department.

#### CHAPTER I

#### THE RELATION OF WORK TO WORKERS

#### NATIONAL VERSUS INDIVIDUAL POINTS OF VIEW

### 1. Choice of Work

That the nation's wealth depends upon the workers' health

has not yet been fully realised by the nation.

WE have seen that, when brought face to face with the alternatives of losing trade or of sacrificing the health of the workers, the nation, hesitantly, chooses the former.1 We have further seen that on purely economic grounds it does not profit a nation to gain trade at the cost of its workers. But the national conscience is not yet fully awakened to the necessity for controlling industry with a view to their wellbeing, nor is the connection between the workers' health and the nation's wealth so obvious as to determine national conduct. Certain general restrictions are placed upon industry in England-no one may employ slaves, for example, or pay his factory-hands in kind; and there are increasing numbers of regulations with respect to particular processes; but, from rag-picking to prostitution, individuals still earn a livelihood in ways prejudicial to the life of the nation, and the nation does not say them nay. An employer, aiming only at his own immediate profit, might conceivably find it in the exhaustion of his

¹ At the present day the alternatives are presented by the ragpicking industry, for example. Should it be tolerated in a civilised land which has failed to discover a way to disinfect rags without marring their material?

employees, that is, in the rapid wearing out of that factor of production which does not form part of his capital; but a nation whose interest is in the future no less than in the present dare not wilfully mortgage that future. But that no great care has This is indibeen exercised in the matter is suggested by the fact cated by the that there is no way of estimating from statistical occupational information the effect of various kinds of work on regard to women. So long ago as 1865, Dr. William Farr women, officially pointed out that occupational mortality "is susceptible of reduction by the investigation and removal of its causes," 1 and thereupon proceeded to give occupational mortality tables for males only. In 1890 2 Dr. Tatham "seriously considered . . . the practicability of investigating" the occupational mortality among female workers, but in 1916 it is still true that there are no "mortality statistics amongst women in industries," although it was understood that in the next decennial supplement of the Registrar-General's Report (due 1915) some attempt was to be made to deal with the matter. The reasons for this lack of information are, as stated by the Registrar-General, "the uncertainty attaching to the statement of female occupations" and the frequent temporary nature of the industrial employment of women.3 From a national point of view it would be well if these difficulties were overcome in the future, and information were collected which would although the give statistical knowledge, not only of the occupa-need for such information tional mortality of women directly employed, but of maternity in relation to present and past employment, and of infantile mortality in relation to the occupational history of mothers. It seems somewhat absurd that the death of a woman "per-

<sup>&</sup>lt;sup>1</sup> Reports, vol. xiii., 1865, pp. xxxiv, xxxv. <sup>2</sup> Supplement to the Sixty-Fifth Annual Report of the Registrar-General, pt. ii., 1908, p. cxxii. Ibid.

manently invalided" in the course of employment

may be "registered as that of a bricklayer's daughter, no mention being made of her previous occupation"; and that only the husband's occupation is mentioned on the death certificate of a married woman.1 factory statistics would not be easily obtained, but if, as seems probable, the nation could benefit by them, the labour involved would be a secondary consideration. It is just possible that sufficient difference might be found in the incidence of disease among, or the effects of strain upon, men and women to make it profitable to exclude either men or women from certain processes which are now carried on by both It appears an anomalous fact that, on account of its injurious effect on male workers (in producing hernia), the making of fish-nets has been, in some abandoned by them and taken up women. It may be that the movements involved are equally injurious to women, or even more so. If the nation forbade women to carry on this work, probably some less harmful method for its execution would be devised. Women are habitually less thoughtful than men in matters concerning their own health, and a mixture of mock-modesty and ignorance commonly prevents them from consciously considering themselves as potential mothers. ever changes may occur, the health of women workers must needs be of paramount importance to the nation. Their position in industry, even though partially safeguarded by legislation, is still unsatisfactory. Trades are not equally open to both sexes, and the vast residuum of mechanical work in factories falls more and more to the lot of women workers. There is a tendency for women to feed the machines which men control; that is to say, women's work is

is strikingly shown, for example, in the making of fish-nets.

Women workers habitually consider their health less than men do,

apt to become mechanical and low-priced, there<sup>1</sup> Supplement to the Sixty-Fifth Annual Report of the Registrar-General, pt. ii., 1908, p. cxxv.

fore uninspiring and inefficient.1 What effect this will have on the life of the nation remains to be seen; at any rate, it is a matter which deserves careful consideration.

Unconsciously, it would seem, women workers yet, while themselves exert a considerable influence in counter-pate acting the possible evil effects of industrial labour. It marriage, appears that, although a woman of eighteen years sciously can often accomplish mechanical work more readily spare their than one of twenty-five, the energy usually expended by the latter is greater. Two explanations may be offered for this fact. The first is that most women of twenty-nive or more, can no longer depend upon their parents, and are bound to be self-supporting, even if they do not have to support others. The burden of responsibility, added to the difficulty of earning a sufficient wage, affords an obvious reason for their anxious, and therefore less successful, efforts. This, indeed, is one of the reasons why employers prefer to engage those girls who live with their parents. The second suggestion is that women, as a rule, do not give themselves unreservedly to their work until they no longer anticipate giving themselves to their offspring.2 That women generally are consciously

<sup>&</sup>lt;sup>1</sup> Vide J. Schoenhof, The Economy of High Wages, 1892.

<sup>&</sup>lt;sup>2</sup> In support of this statement we may cite the following: (1) A large and exceptionally healthy factory, where there was no piece-work and where no married women were employed. Women left at about twenty-five years of age. "Their evenings," said the manager, "have ceased to be matters of first-rate importance to them, and they do not mind entering domestic

service." (2) A large department in a factory, where considerable skill was required. The woman in charge said she found the girls almost useless till they were about twenty-five; before that they would not take sufficient interest in their work.

<sup>(3)</sup> A large factory where piece-work was general. Beyond a certain wage the girls are said to prefer to "take it out in

<sup>(4) &</sup>quot;It is a truism among managers that girls, even on piece-work, cannot be induced to exceed a pace which enables them to earn what they consider a normally sufficient wage, but

Wise legislation might supplement such unconscious efforts.

The uncertainty of a woman's vocation forms the chief difficulty.

animated by a sense of their responsibilities towards potential offspring is not to be supposed. That there is, dormant, some such sense, can scarcely be doubted. It would probably benefit the whole nation if it were roused to consciousness and fostered by wise legislation. What appears to be petty coquetry might be transmuted into something more worthy of womanhood and more beneficial to the nation. Work and the conditions of work might be such that no physical harm would follow, rests being sufficiently long and wisely arranged. Women would then be assured that thoroughness does not detract from womanliness.

It is the uncertainty of a woman's vocation that forms its chief difficulty. One employer found that women would gladly attend cooking or housewifery classes when they knew they would shortly need to cook or to keep house. But for ten years or more, from fourteen years of age onwards, a factory girl's life-work is undecided. She usually declines to equip herself fully for either doubtful alternative. After ten years of drifting it is not likely that she will be perfectly prepared for either. The few years during which a youth's work is undecided are acknowledged to be difficult, but they are not universal, and are brief when compared with these years in a woman's life. It is not that women are not conscientious; they are often pathetically so. If there is a dreary, monotonous task to be performed, which needs constant and minute attention, it is found that a woman's service is unsurpassed. It is not that women are not intelligent; individual women have again and again in various branches proved their worth. It is not that women are physically weak; individually they may be stronger than individual men, and, at any rate, physical strength is no longer the

during the last few months the motive—'Our soldiers need it'— has made them work at top speed" (Factory Report for 1914, p. 40).

greatest factor in industry. Women are inferiors in the industrial world because they have not decided (except individually) that they desire to be otherwise, or at least that they desire to pay in training the price of efficiency. Whether that price would be worth paying from a national point of view cannot be guessed, and there is, on the part of employers, curiously little attempt to discover the truth in this connection. Where apprenticeship schemes for girls are introduced, they are on a different plan from those for boys, and they are hampered by the same difficulty of vocational uncertainty. If girls and women could be convinced that efficiency was essential for their future, whether they married or not, and if they could likewise be convinced that industrial efficiency in no way impaired their value as wives and mothers, and would meet with adequate recompense, the human element in production would become much more effective, and the nation would reap the benefit.

Another question raised by the clash of employers' The employinterests with national interests is that of boy-labour. in "blind-"In one place, educational training preparatory to alley" the emigration of lads . . . employed in more or less gives rise to blind-alley occupations "1 is provided by employers. a somewhat similar This is doubtless well intentioned on the part problem, of the employers and of benefit to the lads concerned. The Dominions are not slow to welcome such immigrants, and perhaps the Empire does not suffer for which ultimately. But the question for England is one of affords no immediate national importance. Can she afford to real solulose her youths? If not, she must not permit them to tion. be enticed into blind alleys by English employers and given no hope of escape except by crossing the ocean.

With the abolition of slavery the workers ceased to be part of the employers' capital, but they remain an essential part of the national capital. Needless

Factory Report for 1914, p. 31.

risk of life is forbidden by the State, but it has, as yet, made but faint attempts to guarantee that the health and the strength of workers are expended in those ways that are best for the individual and the nation. The State does not even know whether it is necessary for its own welfare that its women should remain of inferior efficiency,1 but, at any rate, steps might be taken to discover the truth so far as that is possible.

As a consequence of the nation's suitable for particular classes of employer's choice is practically unrestricted.

The ignorance and the apathy which exist with regard to the appropriateness of work for women neglecting to are found, in varying degree, throughout the whole consider what work is field of industry. The community as a whole gives no guidance as to the suitability of various kinds of work to varying temperament and ability, but leaves workers, the it to be determined by accident, or, at best, by the care of more or less far-sighted employers. In England almost the only selection is that made by employers, though Labour Exchanges and After-Care Committees are now endeavouring to guide workers in their choice of occupation. This departure presents great opportunities.

# 2. Choice of Workers

Modern employers, in their endeavour to select efficient workers.

The selection of workers according to the work they are to do is carried out most systematically by certain employers who have obtained a more or less complete command of the local labour market. Rapidly growing with growing knowledge is the tendency on the part of employers to abandon the least efficient workers. It is many years 2 since the

1 Not inefficient as regards the work they are given to do, but doing inferior work to that which they might do efficiently.

<sup>2</sup> Francis Horner, M.P. (brother of Leonard Horner, inspector of factories), in a debate on June 6, 1815, said "an agreement had been made between a London parish and a Lancashire manufacturer, by which it was stipulated that, with every twenty sound children one idiot should be taken!" (vide "Alfred," vol. i. p. 17; Fielden, Curse of the Factory System, p. 12; Quarterly Review, Dec. 1836, p. 401).

employer who took pauper children as apprentices was expected to take one feeble-minded child with every twenty children. Employers may now choose where they will, and, apparently, the limit is fixed only by the real wages offered, and the intelligence of the human race. Physical and mental, sometimes even set up quasi-moral, standards are set up. The one most various standards commonly stated, because the easiest to state, is the mental. The nation has standardised education, and educational the employer finds it easy to say he will take no one who has not a fifth, sixth, or seventh standard certificate. This is one of the earlier conditions made by an employer when he feels he has sufficiently established his control over the local labour market. That it is to his advantage is apparent, and experience proves it. That it tends to raise the standard of education in the neighbourhood is also obvious. But it follows that this particular employer skims off the cream of the working class, and this is proved by experience in many cases. Many employers insist upon a mental test of their own; applicants are expected to submit to a more or less informal examination, written as well as oral; but it is much easier to accept the national standard, and the easier course is the more common, though rerhaps not among the most progressive firms.

All employers adopt some sort of rough physical physical, standard, one of appearance practically; but this is amplified and made more or less scientific by many employers at the present time. Tests of physical

<sup>1</sup> That an employer's standard is not necessarily such that conformity with it is likely to benefit the nation is suggested by a chorus girl's remark that certain managers find it more pro-fitable, more likely to "fill the stalls," if the girls are not "straight"; and it is not an unknown argument, even in wouldbe-democratic Australia, that the extension of educational facilities will leave "no one to do the dirty work." If "dirty work" has to be done for the sake of the nation it becomes honourable (even killing men is so regarded); but the decision as to the necessity for any particular form of work is scarcely a matter for individuals whose profit depends upon their verdict.

cleanliness are among those most commonly applied in good factories, especially food factories. In some cases the effect of school inspections is reported to have been remarkable.<sup>1</sup>

"We do not employ anyone here who has bad teeth," the doctor at one factory remarked to an applicant; "you can find plenty of people who do. We don't." The question arises—what if all employers said likewise? It may be an excellent thing for the nation that all its workers should have good teeth; but, unfortunately, it is only just waking up to the fact.<sup>2</sup>

Meanwhile, some employers refuse an applicant with bad teeth; some offer to put them right, or even to keep them right—though sometimes they find they cannot fulfil their promises.3 The physical standard is, of course, a matter for expert opinion, and many factories now employ a doctor to examine all applicants, not in the capacity of the certifying surgeon of the Factory Acts, whose function is the protection of the weak worker from overstrain in employment, but rather to protect the employer from the financial strain of employing weak workers. What result the Insurance Act will have on the employers' attitude in this respect it is hard to estimate. Many employers have abandoned their own insurance schemes since the Act came into force, and it is just possible that the establishment of universal insurance may relieve individual employers from what they formerly felt to

<sup>&</sup>lt;sup>1</sup> Before they were introduced many firl applicants had to be rejected by employers because of obvious neglect in regard to their hair. Such cases are reported to be much less frequent now.

<sup>&</sup>lt;sup>a</sup> A beginning has been made in the matter of dental clinics in connection with schools.

<sup>\*</sup> It is interesting to note that among employees (those in authority as well as the ordinary workers) there is sometimes doubt as to whether or not the law requires attention to teeth, the conditions made by employers being as binding in some cases as regulations made by a Secretary of State.

be their own responsibility. However this may be, experience has shown that regular, healthy workers are more profitable to their employers than weaklings, and so it will probably continue to pay the employer to retain the services of an examining doctor even when there is no necessity to provide medical attendance in case of sickness.

There is a recognised national certificate to guar- and moral, antee the mental standing of applicants; a duly or quasi-moral. qualified doctor can be retained to examine applicants

physically; but moral standards are by no means so easy to establish or, being established, to justify. Moreover, workers usually consider questions with regard to their private affairs unwarranted intrusions, and they are by no means always willing to accept the standards of morality set up by employers. The ordinary worker fails to appreciate the conventional form of morality which permits an employer to pay the young girls whom he employs a wage which is obviously insufficient for their needs. It might be a shock to employers to hear women of the working class talk as if it were a commonplace for factory girls to give nearly all their wages to the support of the home, and "to depend on boys" for clothes. It accounts very largely for the contempt with which workers regard the "high moral tone" demanded in some factories where women's wages are low. Employers might do much, for formal morality at least, by raising women's wages relatively to men's. A question that girl-applicants are repeatedly asked is, "Do you live with your parents?" Many employers refuse to take those whose answer is in the negative. This is supposed to safeguard the morals of the girls, but it serves as a kind of rough-hewn shield for the employer who wishes to pay his girlworkers less than must be spent on their maintenance, who desires someone to make up the deficit, and who welcomes a parent's care. It may be well for the

nation, and for parents and children individually too, that children should not become independent of their parents at the age of fourteen; but no considered verdict has been given by disinterested persons, and endorsed by the public.

A somewhat similar, but perhaps more complicated, difficulty presents itself in relation to married women. Many employers refuse to give them work, their reasons being very mixed and very little analysed. There is the fear of an inadequate wage for a woman who has children to support; there is the dislike of permitting married women to work side by side with young girls; there is the idea that a man's wage ought to suffice for his wife and children, and there is the conviction that a married woman's work is at home. Whatever the reason, the fact is that many of the best factories employ no married women, though an exception is frequently made in the case of a deserted wife or widow who worked there before her marriage.1 Some employers are willing to make concessions in this matter in cases which seem to them to afford scope for benevolence. But workers hate "benevolence," and any idea of preventing the association of married women with young girls is ridiculed as absurd, if not resented as unwarrantable interference.

A further example of the employer's power to arbitrate on matters of morality is to be found with regard to unmarried mothers. The law of the land imposes no penalty upon them; custom differs from place to place, from class to class, and from time to time. Where accepted decisions are so conflicting it is no light task for the thoughtful, well-intentioned employer to decide. Broadly speaking, workers resent the enforcement of any external standard of

<sup>&</sup>lt;sup>1</sup> Since the outbreak of war it has become much commoner to re-admit married women into factories. This may be only a temporary change.

etiquette or morals; yet at times they are cruelly harsh in their own judgments of their fellow-workers. "I will not work with her," one hears from one worker, while another will declare that it is rank impertinence on the part of an employer to refuse to employ unmarried mothers. Such questions concern the employment of women more nearly than that of men, but there are factories from which men as well as women have been dismissed for immorality.

An employer, then, will set up a standard, mental, physical, moral. To attract the best workers he must offer the best conditions. It may be that he deserves his reward for the service he renders the State ir enforcing higher standards upon its less thinking members; but it is well to look whither this leads. Were this insistence (on seventhstandard certificates, let us say) to become general, it would mean the raising of the national standard, and those who could not reach it would be left to the care of the State, or would become a direct burden on their relatives, much as are the mentally deficient to-day. It rests largely with employers to determine who shall be classed as defective, and the burden of the support of defectives rests on the nation.

A yet more subtle test is just beginning to be The general appreciated by employers, but the scientific founda- adoption of a psychologic tion is not yet well and truly laid. The test is psycho-cal standard logical, and the end in view is the selection of the most might also suitable temperament for the particular kind of work. So far English efforts in this direction are mainly empirical and confined to a strictly limited number of employers. The nation seems as yet unaware of the possibility of saving life by such a regulation as this: No person of a nervous temperament shall be permitted to perform any operation in the process of file-cutting. Such a regulation sounds ludicrous perhaps at this moment, but it seems probable that some day the nation will tire of the frequent suicides

prove of great importance to the nation which,

in contrast with the employer,

minimum qualifications required for each type of work.

To set up and enforce such standards on behalf of the most obvious duty Department,

among file-cutters, and will insist that an expert psychologist must certify to the fitness of a worker before he is allowed to undertake any such nerveracking process. What is true of file-cutting is true in varying ways and varying degrees of other pro-The nation loses unless workers are placed where their labour is most effective; but little is done in this connection at present, except sporadically by employers who trouble themselves about the failures of individual workers. One girl who worked excellently in a factory until she had learnt all she could about her machine, lost all interest in her work as soon as that was accomplished, and became a commonplace and dissatisfied worker, a source of trouble to those in authority over her. That factory afforded no better opening; but the employer did not like to discharge the girl until something else was offered her. Apart from the effect of her dissatisfaction upon the girl herself and upon the other workers, there was an economic loss to the nation through the misapplication of her energies. employer was not in need of her superior capabilities, is interested but the nation was. There might be, for the nation's in maximum sake, a maximum as well as a minimum standard of capability for workers engaged in each type of work. Employers, from interested motives, tend to establish the minimum, whether openly or not, but it is only individual ambition and self-confidence that can carry a worker into a superior grade.

Within certain limits then, by various means, employers are setting up standards of fitness such as the State has not yet ventured upon except in employers is particular cases. To determine standards and to see whether applicants attain them are the most obvious of a Welfare duties of a Welfare Department. Under various names such a department exists in many factories; it does not owe its existence to any desire to benefit employees; it is in origin—at least in some cases—a

purely business department. It is found in factories where employees are treated with little consideration and no respect, and it is found in factories where even their whims are respected. It is found under the most varied leadership—that of an ex-schoolmaster, an ex-inspector of police, a clerk, a Fellow of the Royal College of Organists, a social worker, a nurse, an engineer, a woman with a degree in economics, or one without previous training of any sort. sphere, not less than its success, depends largely on the person at its head. The ex-inspector was there almost entirely to "judge of the characters of applicants." He failed, it would seem, for the manager of the factory and a police officer in the locality agreed in their statements as to the frequency of theft in that factory. Of course it is true that he was chosen because thieving was conspicuous, but in several years no change was effected.

In many cases a Welfare or Social Department exists with vague ideas as to its function and only an indefinite relation to the factory. Choosing the workers gives a and gives it a big, definite responsibility and a raison d'être, in itself raison d'être. no small thing. It is of far-reaching effect, and, in time, brings the department into some sort of personal relation with every worker. But it is a delicate and difficult task, and in some cases has been given up as a hopeless failure; in others, its disadvantages are so apparent that it appears as if nothing would induce employers to attempt it. Employers cannot force Without certain workers upon heads of departments if those overriding heads are to be responsible for the execution of the mental work. At least this seems to be the common experi-managers, ence. It is for this reason that the Welfare Department in some of the best-managed factories does not engage hands. It merely sorts out applicants into groups—those who may be engaged and those who may not. The final selection is left to the departmental head or overlooker. By this means,

personal responsibility is preserved in the department, and a more or less uniform standard is maintained a centralised throughout the factory. Moreover, entrusting to a department central authority the power of admission to a great may be useful in pre- extent prevents favouritism and the undue influence

venting favouritism, of family relationships. Favouritism in selection may lead to favouritism in the work of the department, a thing exceedingly common, intensely hated by workers, and greatly to be feared by the employer. "If you have a relative there, you can get in; if not, you can't." Such is the popular idea of certain factories, and it appears to have considerable foundation in fact. There may be, doubtless are, many reasons why it is well from an employer's point of view that several members of one family should be employed in the same factory, for the family may be known and respected; and community of interest may possibly prove beneficial to the family life. each individual should be admitted on his own merits, and to this end the Welfare Department can work more effectively than departmental managers. In at least one English factory, applicants are considered in relation to the persons who would superthe tempera-vise their work. Two nervous temperaments are not expected to work together smoothly. ing together, theory in that factory is that the workers are chosen with due regard to their psychological characteristics and those of the various heads of departments as well as the nature of the work. But the practice appears rough and ready; for example, one is told that "one red-headed person would not be put

and it can also take into account ments of those work-

> he makes wise selections.1 It is, at any rate, a step 1 "The time when an exact psychology of business life will be. presented as a closed and perfected system lies very far distant,

under another." The manager cannot be blamed for the absence of psychological rules of thumb; and, doubtless, when he brings his long experience to bear upon the question of inter-personal relations in the right direction when workers' personalities are taken into consideration, but it appears somewhat dangerous to rely with scientific confidence on curiously unscientific procedure. Psychologists have not yet sufficient confidence to attempt what is attempted in their name.

A Welfare Department might afford ample Probably opportunity for physiological and psychological more scientific research; and in some factories, without the use of methods scientific terminology, careful personal studies are might be applied with made, and work is altered or modified, to the greater advantage; comfort of individuals and the greater efficiency of the factory. For example, in one case studies were made to ascertain if there was any flagging, and, if so, when it occurred. Milk was then given, day after day, first at one time, then at another, and the effect on the rate of work was carefully studied. It may be argued that this was just a case of speeding up the workers, and that this speeding-up would, in the long run, prove harmful to their physique; on the other hand, it may be argued that keeping them as nearly as possible at the level of what has been ascertained to be their true efficiency prevents them from constant slight overstrain which would finally prove deleterious. But it is idle to argue without ascertaining the facts, and so far that has not been done. For psychological research there is material galore in a factory; but as a rule there is no one capable of using it. Meanwhile, professors and students are hampered in research owing to restricted access to But the earlier the attention of wider circles is directed to its beginnings and to the importance and bearing of its tasks, the quicker and more sound will be the development of this young science. . . Only in the last ten years do we find systematic efforts to apply the experimental results of psychology to the needs of society. . . The study of the individual differences is not applied psychology, but it is the presupposition without which applied psychology would have remained a phantom" (Hugo Münsterberg, Psychology and Industrial Efficiency, 1913, .pp. 3-10).
Vide J. C. Goldmark, Fatigue and Efficiency, 1912.

human material in normal conditions. A psychologist studying fatigue finds himself at a loss unless he can regulate to some extent, or at least observe, all the conditions of the working day, and choose and change the individuals when and where he pleases. Something might be done in the way of permitting scientific study without serious loss to a factory; and it is possible that the results would prove advantageous to all concerned. Meanwhile such studies are already being undertaken by men seeking financial success. In the name of scientific management studies will be made, whether or not they be attempted in the name of science alone; and if scientific management is dreaded now as formerly scientific machinery was dreaded, its advent is no less inevitable. While the results of "timestudies" remain secret and the property of employers, they doubtless form an intangible danger, and are liable to be resented and dreaded by the workers. Under suitable control, the results may prove of great benefit to all.

at any rate, the general adoption of "Scientific Management appears imminent.

> It may be doubted whether any employer would provide for physiological and psychological studies in his factory if the results were to be made public and

free to all, though he would gladly undertake them for his own profit; but, on the other hand, if such employers as the Co-operative Wholesale Society were to adopt more scientific methods of management, it is probable that, from the nature of the society, such an action would have to be explained and justified Hence, inde- to a large number of the working class. National

pendent recognition of the importance of psychological research is needed, and a wider appreciation of the influence of employment on physical, mental, psychointerests are logical, and, perhaps, moral well-being. This brings

us again to the necessity for careful and complete occupational statistics already mentioned. It may

1 Vide ante, p. 77.

supervision in the national urgently needed.

be well to emphasise here the importance of national self-consciousness and of national self-knowledge. To a nation no less than to an individual the oracle might say, "Know thyself". It should be borne in mind that the employer's first desire is for industrial efficiency; profit or loss is the measure of his success or failure. On the other hand, the employees' first desire is naturally for their own welfare, the interpretation of that word being left to their individual pleasure. The national ideal must regulate and adjust these two aims. The national objective is welfare too, but the interpretation of the word must include not only industrial efficiency, but the best in all the individual interpretations, and so involves a judgment as to what is best. Much wider knowledge is needed; the nation must avail itself of the experience acquired by individual employers; must encourage research, whether in factories or in laboratories; and must finally speak with no uncertain voice on the relation of individual vitality and temperament to particular types of work.

# 3. Regulation

We may now briefly consider attempts that are Attempts a being made towards regulating the labour supply of the national the country, and possible developments along these supply of lines. Nothing can be considered normal during the period of the war, and when peace comes to us again nothing will be quite as it was before. Yet, as Miss Anderson points out, it is probable that "the changes that will endure after the war is over are those already begun in movements or tendencies before the war." We may therefore learn something from an examination of such tendencies. Some of them will doubtless be hastened; others may be retarded.

Industrial regulations have been made only when

1 Factory Report for 1014, p. 37.

were first made only when some obvious evil had to be remedied.

A step towards systematic industrial regulation has now been made:

the need for them has become so obvious that it could no longer be ignored. The employment of apprentices was not restricted until the injury to their health and morals was recognised as a menace to the national life. Labour Exchanges were not established till long after unemployment was first recognised as a recurrent, if not a chronic, social disease. Moreover, the first steps towards regulation are generally halting and uncertain, gropings that haply may disclose a way. The Health and Morals of Apprentices Act (1802) was but the beginning of the regulation of children's labour in factories; the Act of 1905 is likely to prove but the first of many attempts to place workers where their work is most advantageous to them and to the nation. To organise industry has been found a paying proposition in individual factories, even at the cost of establishing a separate department, staffed with well-paid officials, and even in spite of the fact that employers could scrap useless workers and choose others, practically whence they would. Further changes in the organisation of work within the factory are, in effect, forced on less far-seeing employers by regulations which compel them to pay for time spent in waiting for work as well as for time spent in working.2 The establishment of a minimum wage thus tends to increase the care with which employees are selected; and this in turn must force organisation of labour upon the State. The nation whose labour supply is limited by national responsibility on the one hand, and by individual intelligence on the other, must needs avail itself of every advantage afforded by organisation. A State Employment Department would be colossal compared with a Factory Welfare Department, but it is no more im-

<sup>1</sup> 5 Edw. vii. c. 18 (Unemployed Workman Act).

<sup>&</sup>lt;sup>2</sup> Vide R. H. Tawney, Minimum Rates in the Tailoring Trade, 1915, pp. 61-2, 147.

possible than a State Education Department or a State Navy or Army, all of which have in comparatively recent times come to be considered inevitable. The war seems likely to accelerate the tendency towards organisation. Before it, Labour Exchanges, though in theory dealing with all, were in practice only successful with certain trades. They failed altogether to touch many of the most highly skilled. There is, from the point of view of progress, special need for them to deal with workers capable of rising to more skilled work. Of course, this would necessitate training, and the State Employment Department must have at its service educational facilities. "Organisation of labour" is capable of a much wider interpretation than that usually accepted. labour of a State will not be completely organised until everyone capable of work is working where he is most effective, everyone too young to work is fitting himself for the place where his work is likely to be most needed, and everyone incapable of work, be it through age, weakness, or wickedness, is cared for according to his necessity. But, as Mr. Beveridge but organsaid of his schemes for world-wide organisation of labour has the labour market, "these, of course, are Utopian great possidreams." Yet, he adds, "the perfect organisation vet untried vet untried just described is . . . the ideal and must be the aim." yet untried

<sup>1</sup> W. H. Beveridge, Unemployment, 1910, p. 198.

### CHAPTER II

### THE INDUSTRIAL ENVIRONMENT

The influence factory environment exerts on workers depends on many factors.

FACTORY workers normally spend the best part of the day in or about a factory. It is possible that the extent of the factory influence depends less upon the time spent there than upon two other considerations first, the susceptibility of the workers; and second, the difference between the home and the factory. The second may be likened to a difference in pressure between two fluids; the workers' susceptibility is comparable with the channels of communication, while the time may be of little more importance in determining the influence than the relative quantities of the fluids in determining their flow. To an outsider who chances to work side by side with habitual factory workers it appears wonderful how they can shut themselves out of their work and shut their work out of their lives so far as they count life. For example, among the ordinary factory girls curiosity as to their work and their accustomed surroundings seems non-existent; not because it has been satisfied, but because it has not been called into being. Ask an average factory girl in an average factory whence her materials come, whither her product goes, and you will probably discover that her ideas extend little further than the next room. If she regards you as an equal, she will most probably laugh at your question. It is as though an unskilled worker brought into a factory only a portion of her consciousness. The outsider will be surprised at first:

but if he himself will work as a factory hand and then' analyse his own experience, he will probably find that when his work is mechanical, he begins, after a very short time, to think of other things. It is possible to work on mechanically without thinking definitely of anything at all, and it is possible, at least for a time, to work on in the same way while thoughts are busy with far different matters. But it appears doubtful whether one can think of one's work and keep on thinking of it, if it be monotonous. The whole of one's consciousness, so to speak, is too big for such work; one must have something more to think of, or cease to think. Now, it may well be that immediate environment has less effect on workers who are reduced to a state of mental torpor; yet even such workers are susceptible to the influence of healthy or unhealthy surroundings, of physical comfort or discomfort. So much, at least, is recognised by the State, and legal enactments voice the national sentiment with regard to the necessity for healthy factory conditions.

The environment of workers may be roughly divided into three parts: (1) elements of which they are conscious; (2) elements of which they are not conscious; and (3) elements of which they are sub-conscious. The last-named are only noticed when a change occurs; for example, the noise in an ironworks becomes painful to the workers when it stops. Elements of all three classes influence the workers. It is not often possible to say, "Beauty Certain here produced gentleness there"; or "A rest then broad effects saved a breakdown now!" Pure in which was the broad effects the broad effects and the broad effects the broad effects are the broad effects. saved a breakdown now!" But in various slight readily disand unexpected ways workers reveal the influence tinguished, which their surroundings have exerted upon them. They copy the factory decorations in their club rooms, if they are given an opportunity and the decorations please them; but in an ordinary way they cannot do this in their own little homes. Yet one feels conscious of a certain ease of bearing among factory

girls whose surroundings are beautiful. There is a striking difference between workers "having a treat" in a garden open to them for a day and workers enjoying a garden which they look upon as theirs: the latter are quiet and methodical, where the former would be boisterous and clumsy. Some people may question whether it is wise to accustom workers to beauty; but it will scarcely be denied that beauty but not even will, if permitted, affect their senses as it affects the senses of other human beings. To converse with workers is of little use in ascertaining the effect on them, their appreciation or indifference. The conscious effect is of little value in comparison with the sub-conscious, and that cannot be estimated without complete knowledge of the individuals.

these are capable of precise measurement.

There is no

defined

legal

minimum

in general; nor are the

standards definite or

completely satisfactory

in detail.

The importance of sub-conscious influences cannot be gauged, and legal enactments are specially necessary in connection with that portion of the environment of which, normally, the workers are not conscious. More or less definite standards have been established with regard to the general conditions of the environment, and we may briefly consider such standards before passing on to an examination of individual methods in advance of the legal minima.

In the first place, it may be noted that there is scientifically commonly no precise, scientifically defined minimum. The ventilation of a factory, for example, must be standard for such as "to render harmless, so far as is practicable, all the gases, vapours, dust, or other impurities generated therein that may be injurious to health."2 "Sufficient means of ventilation" must be provided and "sufficient ventilation maintained." 8

Experts differ as to what test should be applied in estimating efficiency, and in practice the commonest test is the subjective, the value of which, from a

3 Ibid., s. 7 (1).

<sup>&</sup>lt;sup>1</sup> For example, the drainage system in a factory.

<sup>&</sup>lt;sup>8</sup> I Edw. vii. c. 22, s. I (I) (d).

scientific point of view, is open to grave doubt. The Secretary of State may, by special Orders, "prescribe a standard of sufficient ventilation for any class of factories or workshops". The Order of February Experts find 1902 2 stipulates for "not less than 600 cubic feet of difficulty in determining fresh air per hour for each person employed" in tests of the certain specified textile factories; but "fresh air" is desirable, not an unchanging commodity, and vague terms such as "efficient" and "sufficiently" are to be found even in cases of "special requirements".3 True, "in cotton cloth factories in which humidity is produced by artificial means ... the ventilation must be such that during working hours the proportion of carbonic acid in the air does not exceed nine volumes to every ten thousand volumes of air in any part of the factory,"4 but this standard is applied to comparatively few factories, and even in these the tests are not always consistently and regularly carried out. Moreover, the carbon dioxide test is now out of date, and the test at present advocated by experts (notably Dr. Leonard Hill and his colleagues) is that of the katathermometer. The desired object is not providing cubic space, nor increasing the amount of oxygen, nor minimising the carbon dioxide, nor banishing organic poisons, but simply preventing heat stagnation. Some experts will even go so far as to say that what has formerly been considered "bad air," when properly circulated, becomes "good". Thus with bewildering but in spite rapidity do theorists change their standards, and of changing practical men, impeded by the material expression of a past ideal, hesitate to give substance to its successor lest it prove but a stumbling-block in the

Fortunately, as a rule, the old ideal has indirectly practice served the new; cubic space to some extent provided improves. more oxygen and sometimes (incidentally, but not

path of progress.

<sup>&</sup>lt;sup>1</sup> I Edw. VII. c. 22, s. 7 (2). <sup>2</sup> 1902, No. 79. <sup>8</sup> Vide note, p. 39. 4 1 Edw. VII. c. 22, s. 93 (2).

necessarily) lowered the percentage of carbon dioxide; the smaller quantity of carbon dioxide was, as a rule,

accompanied by fewer organic poisons, and now it is recognised, even by the devotees of the katathermometer, that past efforts towards ventilation have in point of fact tended towards preventing heat stagnation. Men "builded better than they knew"; and that is well, for knowledge in these matters is still inadequate. Overcrowding might be deemed by the man in the street to have some definite relation to the question of purity of air. But a Departmental Committee reports that "in gas-lit rooms there is on the whole a marked relative increase in carbonic acid (and so presumably in injurious impurities) in rooms with a large cubic space per person" owing to the greater amount of gas burned; and they assert that "the larger the size of the room, . . . the greater becomes the need of special openings."2 The most highly vitiated air met with by the Committee was in rooms with an air space of about 10,000 cubic feet per person, or forty times the legal minimum. So the legal test of overcrowding is condemned by experts as of little use as far as pure and practice. atmosphere is concerned; yet legally the test remains, and employers, outrunning the law to a remarkable extent in this particular direction, vie with each other in providing "space per person". It may be wondered why this "test" still remains. It is apparently for little better reason than that it is simple—any workman can form some estimate of the cubic capacity of a room, while few realise what is meant by the term "carbonic acid," and fewer still could carry out the test necessary for the quantitative analysis with Dr. J. S. Haldane's apparatus, simple though it be.3 Moreover, the fallacies of the

Legal tests lag behind both theory

<sup>&</sup>lt;sup>1</sup> Report of Departmental Committee on Ventilation, 1902 (Cd. 1302), p. 104.

<sup>2</sup> Ibid., p. 110.

<sup>\*</sup> Ibid., p. 118.

"test" are not obvious, and an "airy" room is easily confused with a "big" room. According to the Departmental Committee the freshness of the air in a room depends, broadly speaking, "on the volume of fresh air introduced per person and per cubic foot of gas burnt"; 1 but this test is not applied by the law except in a few specific cases, and the katathermometer is as yet unknown to the law.

With regard to temperature in factories generally, Temperathe law demands that it be "reasonable," but the ture. interpretation is again left to individuals. It seems probable that by means of wet and dry bulb thermometers or the katathermometer simple scientific tests for a "reasonable" temperature will before long become generally accepted; meanwhile, the subjective test of comfort may be slightly more reliable than in questions of ventilation, although the alleged partiality of the cotton spinners for high temperatures might cast a suspicion on their capabilities as judges of their own physical well-being. The law is definite with regard to limewashing, painting, or washing factory walls and ceilings, but the requirements that every factory be "kept in a cleanly state" and that "adequate means" be provided for draining floors 3 again indicate the scope for individual interpretation of the law, while the question as to what is "sufficient and suitable," in the way of sanitary accommodation, in spite of the Order of February, 1903, still troubles those who deal with minimum requirements.

Let us now consider the practice in regard to these matters. The legal standard may be regarded as depending largely upon individuals for interpretation; and, while this is to some extent inevitable, it renders the task of inspectors and of those who

<sup>8</sup> I Edw. VII. c. 22, s. 8 (1).

<sup>&</sup>lt;sup>1</sup> Report of Departmental Committee on Ventilation, 1902

<sup>(</sup>Cd. 1302), p. 103.
2 I Edw. VII. c. 22, s. 6 (1). In "men's workshops" it need · not even be reasonable.

Overcrowding and ventilation. endeavour to conform with the minimum requirements all the more difficult. Vagueness in statement cannot produce precision in practice. On the other hand, a definite statement may, as in the case of overcrowding, mislead the best-intentioned employers. It is the adjustment of all the conditions which is of practical importance. Cubic space, for example, must be considered in conjunction with means of ventilation—matters beyond the knowledge of the average employer. Experts must design the buildings and arrange the positions of machines and of workers. But this is not sufficient. The ventilation must be regulated, if not by experts, at least by responsible individuals. Difficulties arise frequently; perhaps a worker objects that there is a draught, or, less frequently, that the air is close. Complaints such as these are not disregarded by the best employers, though they rarely receive sufficiently careful consideration. Workers do not always understand that it is for their common good that they are forbidden to touch windows or ventilators; it looks like petty tyranny. Yet the Departmental Committee on Ventilation advises that "a foreman or other person in each room should be made responsible." 1 It mentions also that "the freshness of the air can best be judged of on entering the room from the outside air." The practice of "going round" the factory at least once a day is not uncommon among so-called "Welfare Secretaries." Such a person could, subjectively, judge of the freshness of the air more easily than the foremen; and, while one visit a day is, of course, insufficient for regulating ventilation, general supervision by a trained observer can materially help the foremen in such matters. It is curious how little ventilating systems are understood even by managers of excellent factories; and, especially with mechanical

<sup>&</sup>lt;sup>1</sup> Report of Departmental Committee on Ventilation, 1902, p.·111.

systems, there seems frequently to be no one to regulate and to adapt them to meet varying needs. No generalisation is possible with regard to ventilation—if it were, the law would probably be less Windows, roof-ventilators, plenum vague. exhaust systems, all have their uses. The plenum system has an advantage in that the air can be warmed, cooled, moistened, filtered, or directed as may be desired, but it is liable to be felt locally as a draught; exhaust ventilation is more diffuse, but there is the risk of drawing in air that is not pure. The only generalisation possible is that there is invariably need for the specialised attention of experts. A recent development which affects ventilation directly is the adoption of machinery driven from below instead of by overhead shafts and belts.1 The Departmental Committee of 1902 somewhat deprecated the use of overhead shafting, while now (1915) scientists are inclined to think that such machinery may be beneficial. The idea was that it short-circuited air currents; now it is believed to prevent heat-stagnation. For example, a factory which covers five acres consists of one huge room, even the three hundred yards of road down its centre being in full view of the workers. In this particular case there is much overhead shafting and the question of ventilation is rather complex.2 Factories like this are not to be found in the centre of cities. The tendency to build factories out of town conduces towards the provision of pure air for the workers; but there is a further tendency for the towns to follow the factories and, unless precautions are taken, there is no guarantee that a factory whose present isolation makes it "like

<sup>2</sup> Fresh air is distributed throughout by means of underground ducts.

<sup>&</sup>lt;sup>1</sup> Office partitions, too, are commonly made lower than in former years, or abolished, and so movements of the air are less impeded. Psychological effects of these innovations are considered in Chapter IV.

a fever hospital" (a director's description of a recently moved factory in which, owing to fear of fire, the departments were widely separated by strips of garden) will not one day be as closely built in as Saltaire is now, some sixty years after its foundation. Indeed, the river and park hard by the Saltaire factory retain for it more open ground than seems likely to be retained in most cases. One employer's attempts at providing a pure atmosphere for his workpeople have extended even as far as an open-air workroom. But this is likely to be of little general importance in a climate like that of England, and even in warmer countries factory workers need protection from hot or dusty winds. Moreover, wind is distinctly trying for the workers even though it be neither excessively hot, nor cold, nor dusty; and in point of fact the workroom described by the factory inspector as "open air" can be closed in if need arise. Certain processes render the difficulties of ventilation peculiarly great. Dusty work, for example, demands special care. Powder-laden air is occasionally drawn through water, but there is more commonly a draught for withdrawing the dust. According to the factory inspector's report for 1913, in the excessively dusty process of flax-scutching, "the outlook at the present time is distinctly hopeful for the future." "One or two mills" are reported to be "well equipped with fans which effectively remove the light dust. Several occupiers intimated their intentions to visit these mills and to do their best to provide equally good plants. The problem, though pressing, is difficult by reason of its magnitude and of the defective knowledge and resources of those concerned." 1 "A number of examples of well-planned installations, which in practice have secured the desired results" with regard to "the removal of injurious dust and fumes" have been compiled by Sir Hamilton Freer-

<sup>&</sup>lt;sup>1</sup> Factory Report for 1913, p. 14.

Smith "for the information of manufacturers." 1 It seems surprising that with regard to bronzing, for example, certain factories, whose owners pride themselves on their care of the workers' health, have not yet reached the standard suggested by Sir Hamilton

Freer-Smith in 1906.

Lighting necessarily receives careful consideration Lighting from employers in so far as it is essential to the work, and it is perhaps on account of this that the law does not impose any general regulations with regard to it. However, it needs consideration also from the point of view of the workers' sight; and practice varies greatly in this respect. There are factories in which workers improvise shades to protect their eyes from the glare of a low light, which is necessary for their work, and there are factories in which the employers themselves carefully shade lights, even attempting to ascertain what light or what coloured globe best suits an individual worker. There seems as yet no certainty as to what artificial lights are best, or in what positions they prove most satisfactory. Small lights on the needles of sewing-machines, for example, are being adopted by some employers, while others are abandoning them as injurious to workers' eyes. With sunlight there seem to be two essentials, quantity and diffuseness. The farther north the factory, the greater the eagerness for light. There are factories with walls almost entirely of glass; to prevent glare these have to be shaded on at least two sides unless the glass is prismatic and diffuses the light in transmission. Roof-lights are becoming very common, and the top floor of a building is often splendidly lighted. The most effective form is probably the saw-toothed roof, with the glass facing north at the least angle such that no direct light can enter, even in summer. The glass then presents a maximum surface; and the fact that, in these latitudes, it can

<sup>&</sup>lt;sup>1</sup> [Cd. 3223], 1906, p. 5, etc.

be sloped in such a way that the rain will wash it, is an additional advantage. It would seem that the principle of the saw-toothed roof is not understood by many of those responsible for its construction. A biscuit factory in the north of England, for example, has a saw-toothed roof in which only about one-third of the surface is of glass and half of that faces south. The light may therefore fall directly on the work, and has to be shut out or else permitted to dazzle the eyes of the workers.

Cleanliness.

Few factories can be considered ideal as far as cleanliness is concerned. Walls are often glazed, and so can readily be washed; but floors present special difficulties. Two hundred and fifty-three workshops of various trades were examined in Birmingham, and it was found that the floors of half of them had never been washed. Washing wooden floors is said to be of doubtful benefit—it is seldom a thorough cleansing, and it makes the floor rough, and a harbour for dirt; moreover, the labour entailed is serious. The first alternative is to have concrete floors, but they are not comfortable for the workers. Attempts have been made to use low wooden platforms or gratings on concrete floors, but these are not particularly comfortable, nor are they much better than wooden floors from the point of view of cleanliness, though of great service in damp places. Rubber floors are made, and there are many coverings for floors; but their cost is prohibitive. A floor which costs less than wood block floors and is seamless, fireproof, vermin-proof, and warm to the feet, is now made by several firms, the principal ingredient being magnesite. At first some difficulty was experienced in laying these floors, but they now appear to be giving satisfaction. Some such flooring might become general if sufficient attention were directed to the importance of this matter, but "the proper.

<sup>&</sup>lt;sup>1</sup> Factory Inspector's Report for 1913, p. 4.

laying and draining of floors does not receive the attention of architects and builders that it should." 1 Factories in which floors are washed every week are not common. In one factory some floors are scrubbed every day, and the floor of each department is scrubbed once a week. This, of course, necessitates the employment of a special cleaning staff, and, though some employers of very good standing say it would "make their hair stand on end" if they had to employ a cleaning staff, there seems to be a movement in this direction. There are, of course, pros and cons. In favour of every worker doing his own little bit of cleaning, it may be urged that it makes a legitimate break in an otherwise monotonous task, and that individual responsibility for cleanliness is beneficial to the character of the workers. In favour of a special staff, on the other hand, it may be contended that a factory in which it exists generally looks and is cleaner than one in which the work is unspecialised, and working in a spotless workroom is at least as beneficial to character as hastily "taking off the worst" or "keeping the dirt under"-which frequently appears to be all that is done, even in "good" factories. The wealthier classes would be loth to admit that their love of cleanliness was less than that of those responsible for keeping their homes clean. As to the break in the monotonous task, more pleasing relief than cleaning floors can be found if desired. As a matter of fact, a cleaning staff is coming to be regarded as a necessary part of a large factory establishment. It may be urged that this work of cleaning will not be an acceptable task, and that there will appear in factories a kind of "domestic problem," comparable with that which has agitated the minds of householders for years past. There are, however, many indications to the contrary. First, the members of the cleaning staff of a factory have recognised hours,

<sup>&</sup>lt;sup>1</sup> Factory Inspector's Report for 1913, p. 4.

recognised standing, and the possibility of congenial companionship. Cleaners take a distinct pride in the appearance of the factory, and often display a marked degree of interest in the business. Men as well as women are employed, and in some cases a distinctive uniform suggests special responsibility.

Drainage.

Drainage is a very important matter, but is of such a highly technical character that competent consideration of it is necessarily limited to experts. Practically, workers become conscious of the presence of drains only when they are out of order; and even then, those who are accustomed to a polluted atmosphere are slow to realise that anything is amiss. Local health authorities have control in this matter, as it is recognised as liable to affect the health of the neighbourhood, and to need constant expert supervision.

General appearance.

More and more attention is being devoted to the appearance of factories, both without and within; and though huge blocks of blatantly useful buildings and long rows of hideous saw-toothed roofs still mark the spots where industry is making good progress, here and there are structures not devoid of taste, nor destructive of all dreams of rest. Even saw-toothed roofs can be rendered unobtrusive, without much additional cost, and one is all the more pleased to find excellent lighting in a building which has not proclaimed from afar the method of its illumination. It is difficult to understand why architects do not insist more emphatically on the importance of their art. One architect, responsible for the designs of several northern factories, frankly admitted that he had not planned to make them beautiful without or within, though he said many improvements in appearance, and possibly in comfort, could have been made with practically no additional expense. At the same time, there is a certain straining after splendour; some factories have exteriors and entrance halls which

suggest amusement or luxury rather than monotonous It is unfortunately true that, in a factory approached by marble steps between growing plants, one may find in a remote corner a woman working in a galvanised iron shed, half suffocated by the fumes which enter from another room.1 Underground workrooms, moreover, are still found in factories which value their good name highly.2 Rooms in most large and growing factories appear to be of unequal merit. In one, a splendid room, specially mentioned by the director's wife as healthy and delightful for the workers, was in fact used merely as a storeroom. Public opinion is of great importance to many large employers; and externals readily appeal to casual Some of the residents in a provincial town petitioned their council with regard to a certain factory which they considered a public nuisance; the owner was practically forced to do something to conciliate them, and this is said to explain why charming garden plots have recently sprung up in the factory precincts. Some factory gardens certainly have an obtrusiveness which suggests that they concern the public more nearly than the employees.

The growing practice of using the processes of manufacture for advertisement has undoubtedly influenced the internal architectural structure of workrooms. The most obvious examples of this are to be found in visitors' observation galleries, which are sometimes very simple, but, in at least one case, very elaborate. A broad entrance decorated with palms leads directly to a broad bridge which extends from end to end above the middle of the room, but leads nowhere. The processes being carried on in the room below can be watched with ease, and the whole presents a charming picture. Probably, however, this attempt to please the public results in the room's

<sup>&</sup>quot;'Only when the wind is in the north," says the manager.
Factory Report for 1913, p. 4.

being pleasanter to work in than most of its kind, and there should be no more objection on the part of the workers to being watched at their work than there is among the members of an orchestra. Certainly visitors are disliked by some factory workers, but this may be because they frequently make remarks which the workers consider insulting. Still, in most cases, the latter like to explain their work and to talk about it. In workrooms designed for show purposes the visitors are kept at such distances that they cannot speak to the workers, and this, while doubtless a necessary measure when the public are to be admitted in large numbers and at frequent intervals, detracts from the personal importance of the individual workers.

Plants and flowers are by no means confined to factories which cater for visitors. They are there to make the workrooms pretty, and their presence shows that workers are considered responsive to beauty. Sometimes gardeners are employed to look after the plants and to change them weekly. Plants and pictures are possibly the most obvious of the decorations introduced, but attention is given to the general aspect of workrooms, and even machinery is sometimes arranged with thought as to its appearance. A room which is unobstructed from the workers' heads to the ceiling is much more restful than one crossed and recrossed by shafts and stays. These can often be avoided, and, as mentioned above,1 there seems to be a decided tendency in this direction. It may safely be said that in many factories attempts are being made to make workrooms beautiful, even though they are not used as means of advertisement.

Supervision of workrooms by Welfare Secretaries We may now briefly consider certain workroom arrangements before passing on to those rooms provided expressly for the workers' comfort. The Welfare Secretary, or the official (whatever the name) to whom is entrusted the supervision of the employees,

usually has a general supervision of the workrooms, and the most capable officers have a very thorough knowledge of the work which is carried on. Personal experience of work is not carried very far in England, -probably not so far as in America,—but it is an necessitates, important factor in producing an intelligent interest detailed knowledge in the individual tasks. One sometimes finds in charge of the work, of a Welfare Department men and women who have been employed in other capacities in the factory; but Welfare Secretaries seem generally to have had little or no previous factory experience, and comparatively few of them attempt to gain any direct knowledge of the various processes. This suggests a certain lack of thoroughness for which it is hard to find a reason in the case of many earnest and enthusiastic officers. Possibly class distinction may have something to do with the seeming reluctance to work side by side with the "hands"; but this reason, if it exist, must, as a rule, be sub-conscious.1 The officers really endeavour to understand what is going on, and some of them have been able to suggest numerous little alterations in the arrangement of work or even in mechanical appliances. Sometimes they do not realise how partially their theories are and its carried into practice, not because they are impractic- application. able, but because of the inertia of custom. The most glaring examples of discomfort are removed, but unless the secretary personally insists on the complete carrying out of the idea it will go no farther. One finds an improvement made in the working of one machine, and others, to which the same principle might be applied, still worked as before. For example, take The Welfare the feeding of a self-acting machine, than which no Secretary must conmore monotonous task can be imagined. In one sider the

effect on the

<sup>&</sup>lt;sup>1</sup> In one case a factory worker has been given a position (1) machines, of responsibility comparable with that of a Welfare Secretary, and it is noteworthy that she lacks assurance in placing her opinions before the managers.

factory several mechanical feeds had been introduced, but there were still many cases in which the task was left to human beings. A further rather striking example was that of a factory in which the girl's position on a certain machine was considered derogatory to her modesty. The machine was altered; and the old and the new arrangements were photographed and displayed with some pride. Meanwhile other similar machines continued to be used in the same factory, and seemingly there was no

immediate intention of altering them.

Of course it would be almost impossible for one person to become proficient in every branch of an industry carried on in even one factory; but some measure of personal experience of the work would be advantageous. The use of guards, for instance, is urged continually; but the discomfort of those guards is not understood. Consider the guards, which are supposed to be worn over the faces of workers in aerated-water works. Girls say that they see the grating even after they take off the guards, if they use them all day; and, seemingly, most of them prefer to take the sporting chance of being blinded for life. Guards are often far more than an annoyance or a hindrance; they may be positively harmful. To one who does not realise the temptation it is surprising how often they are dodged. Sometimes the only objection to them is that they make the work slower, which could be met by a rise in piecerates. In such cases it is often possible to make the guard and machine interdependent, and so force on the workers the use of the guards. But there are physiological or psychological objections to some guards, and it may be that the workers are wise in dreading them more than the danger they are meant to avert. Certainly there appears to be ample scope for intelligent study of the objections to them.

Ambulances are fitted up in many factories, and

(2) guards,

first-aid cupboards are quite common. Frequently the prothere are certificated men or women in each depart- vision and ment, and in some cases these are paid small annual first-aid sums by way of recognition. In a number of the appliances, larger factories there are trained nurses always in attendance. There are small casualty rooms with boiling water and all necessary appliances ready. some factories every scratch or bruise must be reported to the officer, who immediately records the time of the accident, its nature, and probable effects. Workers dislike reporting mere scratches, but it is considered a wise precaution, and factory records show decided decreases in blood-poisoning after more stringent regulations have come into force. Much stricter account of accidents is kept in the best factories than the law requires. As usual, the effect of this is many-sided. A man who is continually meeting with slight accidents is considered likely to have a serious accident some day. It is a rough psychological test; and in some factories men are liable to be dismissed if they have an unwarranted number of petty accidents. This of course intensifies their dislike of reporting. The broad question of accident insurance is equally complicated, and among good employers opinions are conflicting with regard to the attitude which should be adopted towards employers' mutual insurance. Some employers pay premiums and then help their workers, as far as they can, to recover from the insurance company. They say that this tends to keep the treatment of employees impartial, and, in effect, obtains expert consideration of every accident; it makes it to the employer's interest to keep risk as low as possible, but not to cut down compensation in any individual case. On the other hand, it is urged by certain employers that it is inhuman to leave an injured man or his relatives to the tender mercies of

## 114 INDUSTRIAL ENVIRONMENT

a company whose only desire is not to pay or to pay as little as possible.

and (4) fireescapes.

The question of fire-escapes is much simpler, and in many factories legal requirements in this respect Fire-drills are by no means unare far outrun. common; some factories have at least one a week. The workers file out and in in a very few minutes. Comparisons between factories in this connection are worthless, but the workers in one huge department can cease work, leave the building by one door, return by another, and resume work within, say, two minutes. The discipline of the department is not impaired, and the orderly break is by some considered to be of benefit both individually and collectively. There are in many factories more or less elaborate fire brigades, engines, and so on, but general fire-drills directly affect the greatest number of people. Firedrills seem impracticable in some cases, because of the interference with work, but where the work is largely manual they can be carried out without much inconvenience in factories whose fire-escapes are adequate.

#### LAVATORIES AND CLOAK-ROOMS

Lavatories demand special care in arrangement Those concerned with the welfare of workers necessarily devote much attention to the consideration of lavatories. The best to be found in factories are as good as modern practice permits, but their position and their supervision need much care. Difficulties with regard to position cannot be treated in any general way; very rarely are lavatories placed so that their entrance cannot be observed; and if they are so placed, some recognised supervision becomes essential. Some people say that the task of supervising lavatories is not work that a responsible person will willingly undertake; and this is made the excuse, even in good factories, for allowing public

or semi-public supervision as a check upon waste of and supertime. In some factories, however, the supervision vision. of dressing-rooms and lavatories forms part of the work of a woman who in addition sews (mending uniforms, for example) or keeps records of various kinds. There seems to be no insurmountable difficulty in obtaining a suitable person for such duties, and yet one may find that, even in a factory where excellent rest-rooms and lavatories are provided, girls have to hand their checks to a man before entering and receive them from him on their return. In one very striking example of this kind the explanation may be that there is not a woman in any position of authority in the factory. In one or two other cases it is curious how much more particular the workers are than those who make arrangements for them; and the fact that no complaints are voiced is by no means a guarantee that the former are satisfied. They will hesitate continually in matters of this kind, and a woman's oversight is therefore especially necessary. Workers, articulating grievances, may complain of wages when what troubles them is poor lavatory accommodation. An example of the extraordinary inconsistency of some well-meaning employers may be given here. A dining-room, where about one hundred girls dined daily and where a cook and her assistants worked, was entirely without lavatory accommodation in connection with it. The factory proper was closed during the dinner hour; yet not one of the workers dared mention such a grievance to the supposedly benevolent employer.

Waste of time is a terror to employers; but Regulations many attempt to avoid it in thoughtless, if not cruel, as to their must ways. To pay a respectable wage to a respectable satisfy the woman for supervising lavatories and conveniences desires of employers would not be difficult or dangerous to an employer, and the but the benefits to the workers are scarcely realised of the by anyone who has not personal knowledge of the workers,

## 116 INDUSTRIAL ENVIRONMENT

misery caused by such conditions as are described by a lady factory inspector in the report for 1913. "There is no doubt," she says, "that glass panels in doors, commoner still, no doors, no bolts, no provision for privacy, is all calculated to 'prevent waste of time,' and it is a pathetic comment on employment that there should be this improper supervision and control of decent and respectable women. That they do sometimes stay longer than is necessary in these places is of course well known to me, but to my thinking it only shows how great the strain is on women and girls that they should desire rest so obtained... Proper conveniences and the supervision of a nice woman," she adds, "would do away with all the drawbacks which employers foresee in complying with the standard laid down in the Order of the Secretary of State so long ago as 1903." 1 It was disconcerting to find in 1914 a "social secretary" substituting clear glass panels for the wooden ones in cloak-room walls, and though this is hardly comparable with the horrible conditions described by H.M. Inspector, it betokens a lamentable failure to realise the modesty of the workers, which is doubtless as sincere as that of educated women, though its expression may be very different.

Cloak-rooms are compulsory only in a few cases, and are not generally provided.

Supervision of lavatories can be very well combined with supervision of cloak-rooms, and this is done in many cases. The law requires cloak-rooms only in a comparatively few factories.<sup>2</sup> Many employers provide accommodation voluntarily, but in many up-to-date factories cloak-rooms are con-

<sup>1</sup> Factory Report for 1913, p. 81.

<sup>&</sup>lt;sup>2</sup> Cloak-rooms must be provided in accumulator works, chromatic, horsehair, paint and colour, and white lead works; also where bronzing, explosives making, flax spinning and weaving, lead smelting, litharge making, red or orange lead making, tinning, vitreous enamelling, and yarn heading are carried on, and in cotton cloth factories and potteries.

spicuous by their absence, and workers' garments are to be seen hanging in the workrooms. Various reasons are given for this arrangement, or lack of arrangement. Some employers say that the workers are so untidy that they hesitate to give them a room for their exclusive use; some, that the girls prefer to keep their discarded garments within sight while at work, and so avoid loss; and some, that workers will not use accommodation provided. The workers themselves often complain of the time occupied in going to and from a cloal room and in extracting their garments amidst at hustling throng.1 In one large, Some superwell-fitted cloak-room the number of paper wrappings vision is needed. left about on Monday morning, when clean overalls were donned, was quite enough to indicate the need for supervision. In that case women were employed to clear up after the girls left the room; but in others it has been found that the girls will themselves deposit their waste paper in receptacles conveniently placed. Sometimes it has been considered advisable but conto permit no girl to enter the cloak-rooms except sideration of the workers' those specially told off to receive the garments handed convenience to them and to place them in the space marked with is essential the owner's number. This necessitates numerous assistants or monitors, who are allowed to leave the workrooms somewhat before the others. It does not seem a plan capable of wide adoption, but it is very efficiently carried out in one or two instances. In one factory the girls pass through the cloak-rooms Various defrom end to end and take their garments from the vices have been tried.

<sup>1</sup> Miss M. Galway, general secretary of the Textile Operatives Society of Ireland, said a factory girl told her that "they have a cloak-room at the end of the spinning room, and it is kept beautifully clean-washed out twice a week and disinfected; the employer pays the girls and they pay a work girl a shilling a week, and she brings all the clothes out and leaves them on a table at the end of the room so that each worker as she leaves work can pick up her clothes and walk out without any rush. That is the best idea I have heard yet" (Departmental Committee on Humidity and Ventilation, 1914, p. 11).

pegs as they pass. This seems especially convenient when they are leaving. The rush is usually less at the beginning than at the end of the work-period. In one factory corridors are used as cloak-rooms, and, apart from the question of supervision (which is important), seem quite convenient. The pegs must be placed so as to permit of the garments hanging freely without touching each other. The most elaborate cloak-rooms are those in which each worker has a locker, with room for hat, cloak, and shoes. The lockers are usually made of metal mesh (wirenetting, for example), and the rooms are heated when necessary. The best cloak-rooms are far in advance of the worst, but the law, as already pointed out, is nearly silent on the matter. Cloak-rooms of a sort are becoming common, especially in food manufacturing industries. The whole question is much more complex than it appears at first sight—space, cleanliness, dryness, even the social distinctions between workers of various grades, must be taken into consideration, as well as time and the safety of the articles deposited. In some factories where no cloak-rooms are provided there may be seen in workrooms lockers of small dimensions (a few inches each way), in which the workers place any special treasures for safety during work-hours. It seems to be true that workers will use good cloak-rooms and will even care for their tidiness; but in many cases the accommodation provided is not of the kind they desire cloak-rooms or will use. Racks for drying wet foot-wear, for instance, are not likely to be utilised by workers who cannot afford a change of shoes. It is interesting to note that, in the Factory Report for 1913, male inspectors, "without exception," comment upon the workers' "want of appreciation for the cloakroom accommodation provided in Cotton Cloth Factories." In one case only eighteen pegs out of sixty were in use, and the workers' clothing was in

as various difficulties have arisen.

will not be used

unless the workers find them suitable.

the weaving shed. This is considered "extremely disappointing," but it is very probable that if the workers themselves were consulted they would find some way of making convenient cloak-rooms.

Very often those whose social standard is con-The Welfare sidered superior fail to appreciate the necessity for Secretary must caretreating with respect wishes of the workers which fully respect appear to them mere whims. A coat, for example, the workers' may be a mark of social distinction. Between a shawl and a coat there may be other, and subtler, differences than the obvious ones. Only coats are worn by middle-class dames, and only shawls obviate the necessity for hats. The question of appearances cannot be considered of less importance to a "factory girl" than to a "society girl"; it is possibly of greater importance, as a factory girl is estimated almost entirely by her appearance. Any interference with it while by an uncomprehending "superior" is therefore likely attempting to modify to cause trouble. In a north of England town one strike their was attributed to the fact that a social secretary objected standards. to the girls' wearing open-work stockings. Few social secretaries would make so bad a mistake as this; its sequel was the disappearance of the rash secretary. Workers will not tamely submit to an obvious interference with an accepted standard, even though it be only a copy of the idiosyncrasies of those who are traditionally "their betters". A standard cannot be destroyed, but it may be transformed; and a social secretary may even determine the direction of the change, but only if it is treated with due respect. To be effective, a standard must be set up by those who accept it; the utmost that an outsider can do efficiently is to present alternatives. Ready-made

#### MESS-ROOMS

ideals do not fit.

Perhaps of greater importance than the provision Diningof cloak-rooms is that of dining-rooms. In some rooms are needed in factories.

cases it is dangerous for the workers to partake of food in workrooms, and it can never be considered desirable. Yet many workers prefer to have their

meals on the premises, for often there is no convenient place in the neighbourhood and, on wet days especially, the streets do not present an inviting prospect. This fact does not escape the notice of employers, and in 1912 the Principal Lady Inspector could say, "many employers and an increasing number are on their own initiative making provision of good mess-rooms. . . . This in itself tends to spread desire among workers for so important an aid to health in other places." 2 According to the Factory Inspector's Report for 1913, "the admirable examples set in a small minority of cases by employers have . . . told in bringing the question [of messrooms] forward, and . . . many employers readier to consider the matter when extending their undertakings than they ever were before, and are thus ready for any amendment of the law in this matter. . . . While the cases, even now to be found,

and are provided in increasing numbers.

<sup>1</sup> It is only in such cases that the Secretary of State has power (under section 78 of the Factory Act of 1901) to enforce Regulations for the provision of dining-rooms. The following Regulations applicable to the Manufacture of Paints and Colours (January 25, 1907) may serve as an example:

where perfectly cooked food from a well-planned and liberal dietary is supplied at cost prices in a good dining-room, will probably always remain exceptional, there seems no reason to despair of seeing in the future everywhere a reasonable provision of cleanly,

Colours (January 25, 1907) may serve as an example:

"8 The occupier shall provide and maintain for the use
of all persons employed in lead process and at the roller mills . . .
a dining-room, unless all workers leave the factory during meal

hours.''

\* Factory Report for 1912, p. 126.

<sup>&</sup>quot;9. No person shall be allowed to introduce, keep, prepare, or partake of any food, drink (other than a medicine provided by the occupier and approved by the Certifying or Appointed Surgeon), or tobacco in any room in which a lead process is carried on. Suitable provision shall be made for the deposit of food brought by persons employed."

properly-cared-for, and suitable rest-rooms where workers can eat and quietly consume the food they bring with them." 1

But there are difficulties which must be faced. Unforeseen Even where mess-rooms are demanded by law and difficulties provided by employers, they are not always used prevent their This is attributed not "to any stubbornness on the being used. part of the men, but to a sensitiveness in exposing their frugal meal to the gaze of their more fortunate fellow-workers." 2 They prefer to eat their food in secret—even at the risk of lead-poisoning. This very real difficulty cannot be overcome by supplying differently priced foods, for the man who can only spare 4d. per day is still contrasted with the man who spends 6d. To make meals part of wages or to make compulsory deductions from wages for food is illegal, and the attendant dangers are too great to be overlooked. Even with the "written consent" of the uniform deduction is unsatisfactory. Differences of meals rouse the curiosity of factory workers very readily and, since they generally indicate corresponding differences in economic standing, they are of considerable significance. No way of completely overcoming this difficulty can be suggested, except the Utopian granting of ample means to all.3

Yet mess-rooms are used by men and women, girls and boys; and it is significant that employers' complaints as to non-use of the rooms they provide seem to come chiefly from quarters where such rooms are obligatory by law, and may therefore be considered as of minimum desirability. Speaking of There is mess-rooms in the Northern Division, a factory great variety in

the kind of dining-room provided:

<sup>&</sup>lt;sup>1</sup> Factory Report for 1913, p. 81.

<sup>&</sup>lt;sup>2</sup> Ibid., p. 48.

Free dinners are occasionally given to workers whose circumstances seem to the Welfare Secretary to warrant it; and a tactful secretary arranges for dinner checks to be given privately to such persons, so that the fact that they receive help in this way may not be observed.

inspector divides them into two groups: (1) those to which workers can bring their own food, and (2) restaurants. The former "are often not satisfactory; the accommodation provided is frequently found to be unattractive, and the rooms bare, illkept, and comfortless. In the restaurants the arrangements are usually much superior, and the food is supplied at a wonderfully cheap rate." 1 Diningrooms are to be found in great numbers and almost endless variety, though a likeness is noticeable between the dining-rooms of widely separated factories belonging to the same employer and also between those of neighbouring firms. Both good and bad examples are followed. The most homelike dining-rooms seen were repeated on a larger scale in another of the same firm's factories; and a most cumbersome method of book-keeping evolved by one firm is to be found in use by another in the same town.<sup>2</sup>

in the first part of a room,

In its first stage the dining-room of a factory is stage, merely merely a place—possibly a part of a workroom partially partitioned off. In one quite unpretentious factory such a place was described as "the diningroom," and then came an explanatory addition-"where the girls take their hats off." Such a diningroom does not inspire much enthusiasm, and when the hands are expected to keep it tidy they often dodge the duty or avoid the use of the place altogether as far as possible. A large unlovely, comfortless shed used as a dining-room in one factory was described by the matron as hopeless; even her suggestions, which is not labelled large on obtrusive posts, to the effect that girls were expected to behave there "as at home," were powerless to prevent disorder. The fact that, the place was not like their homes seemed to have escaped her notice. If one lives with factory hands, sharing their rooms and their inconveniences, one is

greatly appreciated by the workers,

<sup>&</sup>lt;sup>1</sup> Factory Report for 1913, p. 8. Vide Appendix IX.

repeatedly astonished at their devotion to cleanliness and order. Their rooms may be stuffy and small and never perfectly tidy, but the amount of energy expended on them is out of all proportion to the apparent result. To take girls from homes where, by dint of much labour, only partial success can be obtained, to put them in a dining-room which nothing could make attractive, and to ask them to keep it in perfect order is to court failure. There is the difference between hope and despair in the behaviour of girls in a well-appointed dining-room and the behaviour of the same girls in a shed. The girls who romped in the latter, who tossed food about, who threw paper on the floor, and used utensils in ways for which they were never intended, became, by mere transference to a fine mess-room, orderly and decorous. The mess-room was not perfect, and the attendance was limited (the girls washed their own cups, etc.), but the matron said she had had no cause of complaint about these very girls whom before she had considered hopeless. It is doubtless true in contrast that side by side with this change there had been with better others, but there seems to be ample evidence that ments; manners depend very largely on environment. may be that, when an employer provides a diningroom, the workers expect it to be better than anything to which they have been accustomed; their standard for their employer may be high, and their methods of expressing dissatisfaction crude. that they are not merely imposing a fictitious standard upon a generous employer is shown by the fact that in the dining-rooms provided by co-operators, largely in the control of the employees who use them, the standard is commonly higher than in those of private companies, though it never rises to that of the best dining-rooms to be found in factories.

In its second stage the dining-room of a factory stage, has some arrangements for warming food and making facilities for preparing

## 124 INDUSTRIAL ENVIRONMENT

tea—a gas-ring and kettle, perhaps, in the most primitive case. A few of the hands may be told off to prepare the room for the others some minutes before the dinner-hour, and for such services may be paid a time rate if piece-workers, or may receive a special bonus at stated intervals.

In the third stage, someone is appointed to superintend arrangements,

The next stage may be considered that in which someone is employed solely to look after the dining arrangements, but there are many ways in which this is done. The simplest is nothing more than a delegation to one person of the duties performed by the girls themselves in earlier stages,-"hotting up" the food brought, boiling kettles, "mashing tea," clearing up papers and scraps, and so on. In addition to a small payment for such service some employers permit the attendant to sell food for profit. This is almost equivalent to lending the dining-room for use as an ordinary shop or restaurant. It is probably convenient to the workers at times, but it is of the nature of a monopoly for the shopkeeper, and he has a direct interest in his own profits and none in the workers as such. One such shopkeeper in the factory of wellintentioned employers remarked that it was necessary to make the food "look a lot for the money" if one wanted to sell it.

a duty often undertaken by the Welfare Department.

An advance is made when the Welfare Department itself controls the supplies with a view to providing suitable food. The ways in which this is done and the degrees of success with which it meets are again various, and they depend very largely upon the individual in charge of the department as well as the aims of the employers.<sup>1</sup>

The detailed arrangements of such diningrooms are various. The tables and seats in factory dining-rooms are of many kinds. Attempts have been made to use movable tables—tables whose tops can be swung so as to serve as backs of scats when the room is used for entertainments, or tables which can be packed

<sup>1</sup> This subject is discussed in Chapter IV. Part II.

away when the room is wanted for dancing or for games. It is noticeable that, where the workers have most voice in the management of the messroom (for example in Co-operative dining-rooms), there tend to be more comfortable seats (chairs in place of forms, for example), and also more homelike tables, with cloths in place of smooth washable tops—indeed, tablecloths are only possible when the workers take a decided interest in keeping them clean and in decent condition. In one or two factories may be found red or green cloths, and vases of flowers on the tables when they are not in use for meals. Such rooms are made very attractive, and can be quite free from any suggestion of places of toil. In one case the factory dining-room somewhat resembles a picture gallery, the walls of the large room being hung with part of a director's collection of paintings. It is noteworthy that the better the rooms the fewer the complaints as to the behaviour of the employees. In some dining-rooms the girls are waited on by a staff of waitresses, but the advantages of this are dubious. The provision of books in places of ready access appears to be greatly appreciated, though some may question the advantage to be derived from poring over their pages during the short dinner-hour. Where books are supplied the workers seem to take great care of them. In one case it was reported that not one book had ever been lost-goods were sometimes missed from the factory, but from the diningroom never. The employers at that factory scorn the idea of "Welfare Work," and the homely diningroom seems to be largely the result of engaging a homely woman as matron. She said she found no difficulty in keeping the girls' tablecloths clean, but she had not succeeded very well with the men, whose bared arms found resting-places on the tables.

The final step in the development of the factory dining-room may be considered that in which it is

In its final stage, the dining-room is combined with a training school for the factory girls.

used as a domestic training school for the factory girls. This stage is not completed in any factory, but several show indications of movement in this direction. That aspect of the question is considered further in connection with education,1 and the value of food is discussed in relation to physical wellbeing.2

The cost of dining-rooms various ways.

The cost of the rooms themselves is rarely, if ever, is covered in covered by payments from the workers, and diningroom charges (apart from payments for food) are rather the exception than the rule, and are usually found in the less elaborate attempts.<sup>8</sup> Workers are sometimes asked to pay a penny per week for the use of the room and hot water. In some cases the messrooms and rest-rooms are run somewhat on club lines, and only members are allowed to use them.4 The subscriptions are necessarily very low—a shilling per quarter perhaps—and vary with the standing of the employee and the class of accommodation to which he or she is entitled.

If established for philanthropic reasons they are outside the scope of Welfare Work.

In contrast with factory dining-rooms, and in no way to be considered as Welfare Work, are the diningrooms sometimes provided in the neighbourhood of factories by people desiring to assist the workers. To judge by the numbers who use them they are welcome, but they tend to relieve the employer of the responsibility for his workers of which Welfare Work is the expression. Doubtless they are of immediate benefit to workers, but in the long run they and tend to must, if they last, lower the wage-standard. It is possibly for this reason that many an employer is willing to subscribe to a dining-room for cheap good

lower wages.

<sup>&</sup>lt;sup>1</sup> Post, p. 236.

Post, pp. 188 et seqq.

<sup>3</sup> One large firm which does not supply food, but which arranges for "preparing" food brought by the men, estimates the cost of the room at £100 per annum (Document of British Institute of Social Service).

In some cases factory workers object to the use of the name "Common Room" for a room set apart for their use.

dinners in his neighbourhood when he would not venture to run one in connection with his own

factory.

The standard of mess-rooms varies almost infinitely; but all those provided voluntarily by employers may be regarded as experiments towards improving working conditions. It is for this reason that the Principal Lady Factory Inspector in 1014 welcomes, "as an advance on last year," the erection of three or four "wooden huts" on fish-curing plots, though they are only "about 9 feet square," and their outfits comprise only "a stove, kettle, cups, etc., a few pegs for clothes and some barrels for seats." 1

## REST-ROOMS, ETC.

In considering rest-rooms it is necessary to under- Rest-rooms stand the needs they are intended to satisfy. These provide for fall into two main groups-emergency needs and (1) emerthose of ordinary routine, which, though less con-gency needs spicuous, are probably far more important. In cases of sickness or accident it is obviously advantageous to have a room where the patient can be treated, and in cases of slight indisposition an hour's

<sup>1</sup> Factory Report for 1914, p. 96. A curious introduction of the "domestic problem" into industrial surroundings suggests of the "domestic problem" into industrial surroundings suggests itself as a result of a matron's scheme for a house in which her assistants—cooks and maids—could live. She believed it would make a smaller staff possible, as she "could get some hours' work in the morning," she said; the meals would be good and entail practically no additional cost; moreover, she thought she would then be able to provide meals for other employers in the evenings, as many applications were sent to her by those working overtime or wishing to stay after hours in the neighbourhood of the factory. The matron's superior in the neighbourhood of the factory. The matron's superior officers were too wise to permit the execution of such a scheme, and its association with the factory would probably have rendered it impossible; but the suggestion indicates how a capable and enterprising housekeeper can draw upon herself the trouble of the servant problem even when, by force of circumstances, she is set apart from it. The kitchen staff worked from 8.30 a.m. to 6 p.m., or 9 a.m. to 7 p.m.; on Fridays they left at 5 p.m., and on Saturdays at 11 a.m.; approximately a 54-hour week.

and (2) in the ordinary course of work.

rest in a quiet, comfortable room may be all that is needed to restore the worker to normal strength, while an immediate short rest may be far more useful than a deferred longer one. If a worker has to journey home in pain, a day's rest may be less effective than an hour's rest just when it is most needed. But quite apart from sickness or accident there are times when a rest-room is eminently desirable and even essential to the best interests of all concerned. Needs needs arising of two kinds arise in the ordinary routine of factories. Instances of the first kind are found in all factories, as all workers have normally part of the dinner interval free for rest or recreation; instances of the second kind are found in those factories where work is necessarily more or less intermittent for some of the workers. In the first case the commonest method of meeting the need is to permit the use of the diningroom during the whole dinner interval; often books are added; sometimes a piano, and one may even find a sewing-machine for the girls' use in such a room.1

Special club buildings are not uncommon.

Roofs in cities, gardens, or open spaces in less crowded districts, are provided with increasing frequency, and it is not uncommon to find an Institute or Club building near a factory or adjoining it. The latter, if wisely managed, with due consideration for the tastes of those for whose use they are intended, can form centres of unlimited interest. Rooms or clubs of this kind are frequently at some distance from rooms in which the processes of manufacture are carried on. They are generally more or less ambitious, and are often used to a large extent after factory hours. Occasionally one finds a house or several houses set aside for the workers, and sometimes special buildings are erected. The houses have a much more homelike feeling about them, and some of them are very tastefully, one might almost say extravagantly, furnished. One such house, set apart

<sup>&</sup>lt;sup>1</sup> Factory Inspector's Report for 1912, p. 150.

for use as a club by the superior employees of a certain large firm, bears throughout, though not obtrusively, traces of a director's hobby of curio-collecting. One finds elsewhere museums for the education of the employees, but this beautifully furnished house for their sole use is quite a different thing. Doubtless the report that the director is very proud of it, suggests that it is not an entirely altruistic scheme, but one whereby he casts upon his hobby the light of devotion to the interests of his employees; but the fact remains that, in the attempt, he has provided a delightful club for them. would not be worth a thought if considered as an alternative to a living wage, but it is not; and, in effect, it seems as likely to arouse discontent with discomfort in homes as to create satisfaction with existing conditions. But there is in the hearts of Trade Unionists a distinct fear of such efforts on the part of employers. They resent anything which, while beyond their wildest dreams for all, tends to satisfy some. That which may some day in the near future be rendered compulsory for all employers is not disliked as are these luxurious extravagances of well-meaning, generous employers. Class feeling, in so far as it represents a spirit of common humanity, is one which Trade Unionists necessarily value highly, and they resent the selfish content of a group.

Let us now consider the inconspicuous rest-rooms which are provided occasionally, but far too rarely, where work is intermittent. If one walks through a where work printing department of a factory, for example, one is intermittent may chance to see girls waiting for the machine to be there should set. They are paid by time, and so it may be be opporthoughtlessly concluded that delay is a matter of no rest, moment to them. But those girls waiting about

<sup>&</sup>lt;sup>1</sup> As in many other cases, the work of women here presents special problems. Numbers of women have to wait between jobs for men to set their machines in order.

in the workrooms, usually with no resting-place, often without seats, present a sorry spectacle; and the picture of one lying asleep in ungainly discomfort on some scrapped material should be enough to suggest rest-rooms to any thinking employer. As usual, there are pros and cons. Employers say that

in spite of objections urged by some employers.

if the girls are made comfortable while they wait they tend to wait longer, and for the same reason reading is forbidden in these intervals (though, in one case, a further reason seemed to be the Welfare Secretary's consciousness of her inability to supervise the reading material). But those who value discipline in a factory and those who consider the comfort of the individual workers are beginning to provide seats, and then small apartments or recesses, for the use of the waiting girls. Here they sit, and are permitted to knit or sew or read (and, possibly, sleep) during the brief intervals. It may be that more perfect organisation might discover some way in which they could be advantageously employed in other work in the factory during the setting of machines, but at any rate until such arrangements are made the waiting-time cannot be disregarded. Girls often complete clean and pretty pieces of fancy-work in these little rest-rooms, and they certainly seem less likely to acquire lazy habits in this way than by loitering in the workrooms. Seats are by no means as common as possible in factories; where they have been provided with the utmost care they do not always meet with the approval of the workers, who say they can work more quickly standing and, if piece-workers, generally prefer to stand. But the presence of a seat is a great advantage, and it occasionally happens that workers believe that

certain of their number are specially favoured by overlookers if they are kept long at jobs which permit of sitting. In some factories the seats (for machinists, for example) are carefully adapted to individual requirements; and tables are made of various heights,

The provision of suitable seats is desirable.

so that workers may not have to stoop or stretch unnecessarily. The employer hopes to be repaid by their greater efficiency.

We may now briefly consider two points which, though not strictly connected with factory environment, are most conveniently dealt with in this chapter.

#### UNIFORMS

In many factories, especially the larger ones and Uniforms those in which food is prepared, girls wear uniforms. are provided for girls The reason why these are more commonly used for more frewomen than for men is probably that women have not quently than for men. as yet adopted a style of dress suitable to factory surroundings. In some few factories men wear uniforms, but they are commonly white overalls or blue dungarees, and their use is so obvious that they are not looked upon as uniforms. Doubtless there is sometimes an attempt at the spectacular in the choice of uniforms. An employer remarks that he cannot get the girls to wear them, and one feels, when shown a brilliant red blouse as part of the desired uniform, that the reason is not far to seek. "Factory girls It is like bright colours" is accepted as true by those necessary to who do not know "factory girls"; and the mistake workers' of forcing brilliant uniforms upon them is made again taste and again. Girls' tastes differ greatly, and it is never an easy task to choose a uniform that will please all; when it is chosen, it will almost certainly not be a bright one. Caps are perhaps the sorest trial to factory superintendents. Girls who pride themselves on their hair will often cover it in some haphazard way, but generally they will be careful that the way becomes them, and they have a rooted and ineradicable objection to a cap which they consider ugly. A wise Welfare Secretary, if she decides that caps are desirable, not only consults the girls as to their style, but is prepared, if need be, to change it several times

before a satisfactory one is found, and she will not expect that it will prove satisfactory in perpetuity. Uniforms can be pretty, and in a number of factories the girls seem to like them; they "save" their own clothes, and are comfortable and convenient. all the women (even "staff ladies") connected with a factory wear uniform of some sort, the social objection is to a great extent obviated. To denote standing by the colour of the uniforms is not uncommon,1 and occasionally departments are so distinguished from each other. In one factory where men and girls are kept apart as far as practicable, those men who are allowed to enter rooms where women are working have special badges. To forbid the wearing of factory uniforms off the premises makes for cleanliness, but the loss of time involved in changing, especially in the dinner-hour, must be considered; and perhaps the order is only reasonable when good dining and recreation rooms are provided. In many factories the uniforms are laundered and mended on the premises, but probably it is more usual to insist that the girls appear each Monday in a clean uniform; and often, to ensure that this is done, as well as for the sake of variety, the colour or style is different on alternate weeks. The commonest method of supplying uniforms seems to be to give one (or the material for it) as soon as the girl has served her probation, and to expect her to buy another and to keep herself provided with two thereafter, the material being supplied at cost price by the firm and weekly deductions being made from the girl's wages until the cost is covered. There are some factories in which the costumes are supplied ready made, and this ensures uniformity. Where workers are likely to get wet, waterproof aprons and wooden clogs are commonly provided, but it seems that no apron has as yet proved quite

and their convenience in this matter.

One employer issues collars of varying colours to denote varying merit. This is comparable with Owen's conduct blocks.

satisfactory.1 . The law in relation to certain wet processes is that aprons of "suitable material" shall be provided by occupiers and worn by workers (in flax mills and linen factories). But the workers appear to dislike these aprons, especially the upper parts or bibs; and Professor Leonard Hill says that, for hygienic reasons, he "would not let them have those waterproof aprons at all," 2 even though they have to go home in their wet clothes, summer and winter. He suggests that the workers in humidified sheds should wear "something like a loose cotton robe, or overall, or pyjamas . . . • a loose cotton thing that could be taken off—it would not matter getting wet in the mill—and hung up in drying rooms." There seem to be rooted objections to changing clothes at a factory, (1) because of the time it takes, and (2) because of the lack of privacy. Even when a factory girl "puts all her money on her back," she is not often able to provide underclothing with which her dearest enemy could find no fault, and to be forced to undress in her presence is a trial not to be undergone. In course of time the result may be an improvement in clothing comparable to that reported at certain Schools for Mothers owing to the stripping of babies before weighing; but it is an exceedingly delicate matter in its initial stages. Overalls and aprons merely put on over ordinary clothing are much easier to arrange on this account.

### CHECKING ON

One detail of factory management which does not checking on. seem to be considered in relation to Welfare Work may here be mentioned, namely, checking on. Clocks which record the time at which a worker arrives are in many cases provided, but the expense is often con-

<sup>&</sup>lt;sup>1</sup> Departmental Committee on Humidity and Ventilation, 1914, Q3431, etc.

<sup>2</sup> Ibid., Q3549, etc.

# 134 INDUSTRIAL ENVIRONMENT

sidered too great by conservative English firms; and some firms really hesitate to supplant the oldfashioned time-keeper by machines. This may be a question of business management with no direct bearing upon the welfare of the workers, but the oldfashioned checks are often a source of annoyance. They render mistakes likely; they are liable to be lost, and the workers have to pay for a renewal. Girls are sometimes to be seen holding metal checks in their hands during the dinner-hour, and the care of checks is more bother to them than to men with numerous pockets! Of course, in many factories the checks are just transferred from one board to another or from board to box, and the question of losing them becomes less important. The most obvious disadvantages then are the possibility of mistakes and the labour involved in recording the transference.

### CHAPTER III

## WAGES AND HOURS

# (I) WAGES

A discussion as to the merits of the wage system, Attempts to and the possibility or desirability of its overthrow, is make the not to the point here; nor can we do more than wage system touch upon the distinctions between payment by work piece and payment by time. Many and varied are the schemes whereby employers have sought to modify the wage system; they extend from the payment of an annual bonus to the complex attempts at prosperity sharing and co-partnership; books have already been devoted to discussions and explanations of these experiments, and many more may safely be expected. The only aspect of the question with which we can now deal is its relation to the consciousness of the workers. Broad questions such as the justice or iniquity of permitting one man to purchase for himself the life-work of another do not concern us here; we are considering only some attempts at making the existing system work smoothly and their success or failure.

The question of wages appears fundamental to the are feared by relation of employer to employees, and the primary lest, by difficulty which faces any employer who ventures accepting upon so-called "Welfare Work" is this—as soon as called Welhe spends money upon anything which is intended fare Work, they seem to expressly for the employees he seems committed to acknowledge the belief that he is already paying sufficient wages that their wages are

and has a margin with which to experiment. Now it is not within the range of possibility that the wages he is paying should appear sufficient to his workers, for their standard is an ever-rising one; it will rise while there is any desirable thing beyond their means of attainment. It is for this reason that a large employer says 1 the interests of employer and employees can never coincide, although they may tend in the same direction. It is for this reason that an employer who fixes wages a shilling or two in advance of what they have been and then thinks them sufficient becomes a target for abuse.2 There is not even in theory a level at which wages can be fixed so as to produce complete satisfaction on both sides. Frequently, for example, a firm would like to build and equip a fine dining-hall, perhaps for the welfare of workers, perhaps for show purposes. It is cheaper and much more conspicuous in the world of purchasers than paying higher wages. Such a building may be accepted, even enjoyed, by workers if they are convinced it is but a form of advertisement; for they understand something of the necessity for publicity in this day of competition. But if they think it is a make-weight in lieu of a rise in wages, they will none of it, for then it carries with it the tacit understanding that their wages are high enough.

Before Welfare Work as such can be successful, wages must be at least as high as any in the neighbourhood, and as a matter of fact they are generally high in the most conspicuous cases of Welfare Work.

Welfare Work as such deals with the standard of reason do workers con- living of the workers, and to them the only measure sider money of that standard is the wage paid. The test unconsciously applied by those most nearly concerned their recom- is the money wage; and this is not altogether unreasonable. Money wages represent the amount of

Not without wages the measure of

<sup>1</sup> The Way to Industrial Peace, 1914. 2 Vide Appendix IV,

uncontrolled command over commodities which the workers possess. There is a suggestion of economic freedom in the possession of money which does not escape their notice, and in a world swayed by finance it is but natural that hard cash should seem to them

of the highest importance.

All those most deeply concerned in the welfare of hence the the workers are agreed that, as a matter of policy as method of fixing wages well as of justice, wages must be the first considera- is of great tion. But differences arise as soon as any standard is importance. suggested. Yet in practice wages or rates of wages have to be fixed, and we may now consider how this is done. We may for the time neglect the difference between payment by time and by piece, for time rates have in reality a corresponding piece basis, and piece rates are set on the basis of the time the work takes.

How then are rates set? Throughout the in-They may be dustrial world they were formerly left to settle arbitrarily themselves. The laissez-faire idea prevailed; em-test period. ployers gave as little as possible, and workmen took as much as they could get. That they might be in a stronger position in this higgling process the workers combined. Bargains were made between groups of workmen and an employer or a group of employers, but the principle was still the same. Workers could hold but longer, and some standard of living was gradually acknowledged to be necessary; but the employers' object was to keep down wage-cost and the employees' object was to raise wages, and the rate was arbitrarily set after a test period.

During that period employers took care to have during which excellent conditions, and employees took care to work working conditions This system of rate-settling are abas slowly as possible. prevails generally to-day in organised trades in normal. England; and workers are said to have dawdled for six months at a stretch while they were on time work, in order that the piece-rate might be set higher than would otherwise be the case. This possibility of

dawdling is allowed for by the masters, and the workers in return demand an allowance for varying conditions; but there is much room for guess-work, and a premium is placed upon deceit.

As the economy of high wages is recognised.

this system is superseded by more scientific methods.

There are signs, however, of a development along other lines. First, employers are beginning to recognise that a high rate of productiveness presupposes a high rate of wages,1 and therefore wage-cost in production is not proportionate to wages paid to the workers. Thus, though no employer can far outrun his rivals, there is felt to be a possible advantage for one who pays higher wages, and so attracts and maintains more efficient workers. The second movement is towards a scientific estimation of the work actually involved—scientific "costing" of the labour needed in production. The work is analysed into elements and the elements are timed separately. As a simple example, take the turning of textile bags right side out and packing them. The work might be analysed into:

- (1) taking work from machine;
- (2) putting it on the stretcher;

(3) pulling it off;

- (4) placing it on the table; and subsequently,
- (5) counting;
- (6) tying;
- (7) removing.

Instead of taking the whole process as one, each part can be treated separately, and timed to the hundredth part of a minute. The average time of

1 "Most of the strife [between employers and workers] would disappear if it were more fully recognised that a high rate of wages has all the time been the powerful lever to reaching the low cost of production which practically rules to-day [1893] in the industries of the United States. . . . A high rate of wages expresses a high rate of productiveness, and its converse a high consuming power. A relatively high consuming power, high standard of living is required to make the laborer efficient, strong in body and in mind. Without this, labor remains economically more or less sterile" (J. Schoenhof, Economy of High Wages, 1893, p. 63).

several workers who are considered average workers is taken as the time for the work, and this gives a more or less scientific basis for a wage rate. It might be possible for several workers to dawdle over the whole process to approximately the same degree, but the separation into elements will reveal any inconsistencies. It is obvious that by such means new knowledge is gained, and it is essential to the wellbeing of the workers that it shall not be a secret weapon which can be turned against them. The Secrecy, not knowledge in itself is not a menace to the workers, is dangerous as some of them and some of their leaders seem to to workers. fear. Those who desire justice have no need to fear truth; but they may well fear a monopoly of the knowledge of the truth, by those whose interests conflict with theirs. It must be noticed first that "dawdling" between the elements of work may be necessary for the health of the workers, and that there is a danger that "record" times may be used as standards; and, secondly, the knowledge of the time taken to accomplish a certain task does not carry with it ipso facto a knowledge of the proper rate of wages. Those who have the interests of the workers at heart must endeavour to ensure a wise use of knowledge. Just as it is easier to fight against a known foe, so it is easier to demand higher rates if there is no suspicion that the workers are unnecessarily dilatory. There is undoubtedly among workers a widespread fear of the knowledge of the time needed for any task, but experience seems to show that this fear fades as the knowledge becomes more exact. definite knowledge of the time taken for a piece of work may well involve a knowledge of the time needed for rest; for it necessitates knowledge of how long the rate of work can be maintained both at a stretch and over a long period. In England, a striking as is clearly example of a change of attitude is that of the em-shown by experience. ployees of a large firm which made careful "time-

studies" in certain departments. The workers were ready to strike at the mere idea of such a thing, but the Trade Union officials were promised that they would be consulted about each case; and, finally, those departments which had not been "timestudied "requested that the new methods might be extended to them. Men do not guess the weight of flour they sell, nor the length of cloth; nor do skilled workers guess the merit of their work; it must reach a certain standard or be cast aside. It is the labour of the unskilled or semi-skilled worker which is sold without knowledge of its worth or even of its quantity. It is really to the workers' interest that more shall be produced at less labour cost, provided that they receive their just proportion of the increased produce. If it were known that, by nothing more than greater diligence on the part of the workers, they could produce in eight hours what they now produce in ten, would it be considered fair that wages should be cut down in spite of the saving in running expenses which would follow? That is what workers fear—not without some reason. If they were confident that wages would remain the same so long as they produced the same quantity and quality of goods, they would probably be able to reduce the time. Such at least seems the case where rates have been guaranteed.

Such knowledge is essential to both Welfare Secretaries and Trade Unions. It is the duty of the Welfare Department to understand, as fully as may be, the worth of the labour, and to realise the relation which exists between a variation in wages and a variation in the standard of living. It may be said that this is likewise the duty of the Trade Union officials when the trade is organised, and doubtless that is so; but the difference of attitude makes the two functions quite different. It is the Trade Union's business to enforce justice towards the workers; it is the Welfare Department's business to be just. Neither can succeed completely, but for success both are dependent upon knowledge.

We may now briefly consider in a general way, in Payment by relation to the workers, the most striking differences time differ between payment by piece and by time. Though in their rethey are fundamentally connected, they differ widely worker's in their reaction upon the human mind.

The nature and the strength of the stimulus afforded by each must be carefully considered by anyone entrusted with the welfare of workers. What is the effect—or rather, what are the effects—of a knowledge of an assured income? What are the effects of a certainty that every effort brings its reward? How may the good elements of both be combined and the evil elements obviated?

Such are the questions which confront the Welfare To study the Department of a factory, and the conflicting opinions difficult problems of Trade Unions as to the desirability of either method involved is of remuneration suggest the complexity of the aduty of the Welfare Deproblems involved. Some Trade Unions prefer partments. piece work, some time payment; and employers differ in the same way. Nor is it merely a question of the kind of work, or of the skill required. Certain kinds of work cannot be paid for by piece, but the distinction is less marked than one would imagine at first sight. Even a manager may be paid according to output. "Odd jobs" may be paid for "by the piece"; and an "odd jobs man" may be employed by time, much as a doctor may be paid per visit or receive a salary per annum, or an artist may be paid for a masterpiece or be "pensioned" by the King.

Trade Union objections to piece rates are con-Objections nected with the fact that work may not be supplied against both regularly or be of exactly the type specified, and methods of also with the fear of strain. Their objections to payment, time rates are based on the lack of discrimination between workers, and the tendency to level down wages to those due to the least efficient. Employers are usually in favour of piece rates, as they lessen the need for supervision. Where great care is necessary,

but not mathematical precision in detail, employers say they dare not put workers on piece work, for it would necessitate such close examination of the work; but where every piece of work must, in any case, be separately examined, workers are often paid by the

piece.

As far as factory inspectors' opinions can be gauged, they seem to favour time payment, as being less trying to the workers. This cannot be wondered at by anyone who has wandered through factories where each system was in force. A packing-room on time payment and a packing-room where workers are paid by output present curiously different spectacles even to a casual observer. In any combination of the two systems the endeavour is to retain sufficient direct interest in the result to ensure diligence, while dispelling anxiety which might distress the worker or impair the accuracy of the work.

being made to combine them.

The first consideration seems to be the difference attempts are in individual workers. Some are so constituted that to modify or they cannot work well in uncertainty, and the strain of asking themselves whether they are working fast enough paralyses their activities. Workers of nervous temperament undoubtedly suffer greatly in this way, and careful Welfare Secretaries watch very closely the variations in wages from day to day, and alter the work when necessary. But apart from individual differences there are modifications of the wage system which are of more or less general practicability.

> In the first place, workers may be put on a partpiecework basis—that is to say, they may have a time wage and in addition a certain interest in the output. Again, this interest may be in the whole output or only in the output above a certain minimum. For instance, a worker may be paid 10s. a week and 1d. per hundred after the first ten thousand articles handled. This method of remuneration certainly has two effects: it makes those who cannot possibly

pass the ten-thousand limit careless as to how few they handle, and it spurs on those who are already likely to work quickly. Obviously there are disadvantages here; and wherever the minimum is placed, some disadvantages will remain. If the time wage is sufficiently high to dispel anxiety, the stimulus only acts on those who need it least. Moreover, one case was witnessed in which articles handled by a slow worker were seized upon by a quick worker, and, though the slow one lost nothing, the quick worker's bonus was increased. Another modification is the substitution of group interest for individual interest. Group in-The payment may be entirely by piece in proportion be substito the work done by the group, or it may be combined tuted for with a certain time wage as well; and the group interest, may vary in size from two workers to an entire department or even factory. Roughly speaking, the smaller the group, the greater the effect of the stimulus to individual effort. Group work has dangers and but group difficulties of its own. The personalities of which work has difficulties of a group is composed may be antagonistic, and then its own. no adjustments will make the work go smoothly. But, in addition to this, group work has as a rule to be based on an arbitrary differentiation between the members of the group, and it not infrequently happens that the greater additional effort meets with the smaller increase in reward. groups can be arranged on terms of equality, with the right of changing jobs if desired; and these seem to work fairly well. But groups are dangerous to deal with, and need constant adjustment and readjustment.1 It is of great importance to all concerned

<sup>&</sup>lt;sup>1</sup> Extract from a firm's notice re a system of rewards: "The Management wish it to be distinctly understood that they do not consider the group method of paying rewards by any means the most satisfactory that can be devised, and the method of paying which is now being put into practice is only a temporary one and will be modified as time goes on, so as to reward individual effort in place of shifts as far as possible."

that the method of determining wages should be clearly understood, and that the relations which exist between the various members of a group should be recognised.

Group payment may develop into profitsharing or co-partnership,

When the group becomes co-extensive with the factory, the group payment is at first of the nature of a bonus, and then develops into profit-sharing, prosperity-sharing, and co-partnership. If a stage of true co-partnership is reached, the relation of employer to employees ceases; but, until that is so, these are but variants of the wage system, and their chief advantage is that they allow some margin for trade fluctuations or other vicissitudes. In so far as they are wage systems, they are intended to stimulate workers to their best activity.

which are beyond the scope of Welfare Work.

To decide upon questions of policy, such as the establishment of a co-partnership or even of a profit-sharing scheme in its strictest sense, is beyond the scope of the Welfare Department in a factory, and may be regarded as appertaining to the business management. But some knowledge of the labour involved in the processes is essential to a Welfare Secretary, who should be conversant with the peculiarities of each kind of work. As has been said before, it is not customary in England for Welfare Secretaries to pass through a course of training in the manual work of the factory, but some degree of familiarity with the work is acquired by them in their association with the workers; and until this, at least, is attained, the Welfare Secretary must hesitate to voice any opinion regarding the adjustment of wages, with regard to either individual workers or particular, processes. It might be well if would-be officers in Welfare Departments had to spend a few weeks, perhaps months, in the ordinary routine of factory labour, even though the processes carried out were entirely different in character. In order to speak with authority on any question concerning wages

they must realise what efforts and what skill are required. The ordinary business management department may be considered adequate to deal with the question of wages, as with other costs; but it is the special duty of the Welfare Department to deal with the question from the workers' point of view. Its officers, then, cannot afford to dispense with any opportunity of approaching nearer to those whom they are expected to understand.

The degree to which wages are, in practice, Only in a supervised by Welfare Departments varies greatly; small factory can so also does the method in which the supervision is the Welfare carried out. In a small factory it has been found Secretary practicable to report to the secretary every day every supervise worker whose output falls below a certain standard. the wages of individuals. The secretary next day interviews each and ascertains as far as possible the reasons for such deficiencies, which are generally remedied. Sometimes the mere fact of a kindly human interest being shown will suffice to remedy the defect; sometimes the work is found to be unsuited to the worker, and change of work is all that is needed. Sometimes change after change is tried before the right work is found. larger factories the Welfare Department staff is rarely sufficiently numerous to permit of daily examination, but weekly examinations are common, the wages department reporting to the employment department all cases below standard. value of this is obvious from the employers' point of view: it maintains the standard of efficiency. Its value from the workers' point of view depends entirely upon the personality of the officer who deals with it. A reprimand for inefficiency may be worse than useless, but a sympathetic examination into the cause of the shortcoming may reveal possibilities of improvement, either particular or general.

Wages as a whole are customarily revised at regular

alterations in wages.

Welfare De- intervals. Age, length of service, exceptional conduct, partment records form and general merit are considered, the management the basis for relying largely upon the records of the Welfare Department, and the personal judgment of its officers, to supplement the departmental managers' reports. The relative importance to be attached to these factors—age, service, conduct, skill—is a matter which closely concerns the Welfare Department, and decisions differ widely. The fact that all are taken into consideration indicates that wages are not expected to be in direct proportion to the work accomplished.<sup>3</sup> The Co-operative Wholesale Society's scale of wages is sometimes used as a standard of comparison, but no definite scheme is universally acknowledged. Payment according to age suggests a basis of necessity, and payment according to sex is sometimes defended on the same ground; payment according to length of service hints at a philanthropic or sentimental basis; only payment to conduct and skill can be said to rely on the utilitarian quid pro quo. The question whether the rate of wages is fixed by economic law is chiefly one of language." "The affirmation is in a sense true, but it is not a very important or a very illuminating truth. At any rate, the inference drawn from it—that wages cannot be modified by human effort—is utterly invalid, and indicates a complete misunderstanding of the character of economic laws."3 One of the most important duties of a Welfare Secretary may be to watch the

Welfare Secretaries, when advising on matters of wages,

<sup>1</sup> It is found advisable, especially with juniors, to revise wages frequently—four times a year at least. Young workers vary greatly, and respond readily to recognition of merit.

"The wages of many women and of a considerable number

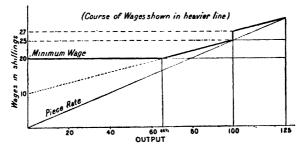
3 John A. Ryan, A Living Wage, 1912.

of the labourers are such that they cannot possibly be conceived of as determined by the efficiency of the labourer, and we must rather take it that they are determined by the operation of the balance of economic forces. It cannot be seriously maintained that these wages represent a harmony in the interests of capital and labour" (Rev. A. T. Carlyle, Wages, 1912, p. 94).

effects of any modifications attempted by the employer and to advise him in respect of them. But in many cases so-called Welfare Secretaries are not allowed any voice in discussions about wages. The must conwhole question presents great difficulty. If the sider both the workers' Welfare Department is "the conscience of the factory," the situation is apt to be strained when the conscience becomes really troublesome!

There are two sides, however, to the question of wages. From the employee's point of view the important things are the amount of the wage, its regularity, and its permanence. From the employer's and the empoint of view the important thing is the effort to ployers' which it stimulates. What method of payment calls forth the best efforts of the workers without in any way injuring them? This is a question which must occupy the attention of the Welfare Department. Very few definite experiments have been made in this direction, and fewer records have been kept. One employer remarked that he had to be continue ally changing his scheme of bonuses, as otherwise the workers would find some way of winning the reward without meriting it! This suggests that the relation of the reward to the merit is at best capricious. In one case very careful experiments are being made, An example and it is probable that a complete record of them of a carefully devised will be published at some later date. They are at system of present inconclusive, but they seem to indicate that wage paythe most satisfactory wage is one in which a fixed given. minimum is guaranteed, and the maximum reward is given for that effort which is the greatest consistent with health and comfort. This type of payment may be indicated by the graph on next page.

Output is shown horizontally, 100 representing a good day's work for a good worker. The piece rate is such that it reaches (say) 25s. at this point (100 output); a minimum wage is fixed at (say) 20s. A line is drawn joining half this minimum on the wage axis with the point of intersection of the 25s. wage line with the 100 output line. The intersection of this line with the minimum wage line marks the output for which no extra reward is paid. Beyond this a lower piece rate is paid, in addition to the minimum, up to 100 output. At this point a fixed rise (say 2s. 6d.) is added to each worker's wage, and beyond that the lower piece rate is continued. The wage therefore rises irregularly, being always more or less in advance of the stated piece rate until the output is considerably above a good day's work. It is farthest in advance when the output is zero, and least when it approaches 100, though at 100 it is



suddenly increased. The idea is that this guarantees a living wage, while supplying a certain stimulus throughout, the greatest stimulus being near the point to which it is thought workers can safely be expected to attain. Beyond that there is no special stimulus, as it is considered undesirable to encourage them to efforts which might prove injurious to them.

This is but one of many schemes in operation by way of experiment at one factory, but it suggests the line along which experiments are being made. A large percentage of the workers habitually reach or even pass the 100 output. There are several obvious drawbacks to such a system. Perhaps the chief is that, if there is a piece rate at all, it seems

inconsistent with ideas of justice that only half or two-thirds of that rate should be paid during a period of production. Then also the piece rate is in this case such that it always gives less than the actual wage, which certainly suggests that it is too low, or is merely a nominal figure in which no confidence can be placed.

As was remarked above, it is of the utmost im- It is essential portance that the workers should understand the that the workers system upon which they are paid, and that is the should chief merit of the two simple systems—a fixed time understand wage or a fixed piece rate. But if a little trouble upon which be taken by the Weldare Department, such a system they are paid. as this of a "piece rate with a guaranteed day wage" seems readily understood, and it merely remains for the Welfare Department to ascertain the arrangement most satisfactory to all concerned. The psychological advantage of having a definite "reward" at a certain point is comparable to the "goal" in football, which may convert the mere "kicking a bit of leather about a field " into a scientific game. Just as there are some men too weak to attempt to play football, so it is possible there may be some workers too weak to be confronted with a normal task. is the Welfare Secretary's duty to recognise such workers both on account of their interests and those of the employer.

It is also his duty to supervise fines and rewards of all kinds, not merely because the discipline of the factory is a matter for which the Welfare Department is generally responsible, but also because it is his business to understand as far as may be the effects upon individuals of rewards and punishments. It is always the duty of the Welfare Secretary to consider in all their bearings the complications which arise from the interaction of human personalities and abstract economic principles.

Before leaving the subject of wages, we may notice that the act of paying wages is sometimes used

as a personal link between employer and employee. Samuel Morley, for example, insisted on preserving this periodical communication with his employees; and to this day some employers maintain the custom. It is possible that something of this nature might be useful in the administration of a Welfare Department; but the number of the staff is usually quite inadequate to cope with such a task in any really personal way, and probably any mechanical relations would be harmful rather than helpful. The Welfare Department has its raison d'être in the selection and rejection of workers, and this affords sufficient formal connection with the business management of the factory, while. opening the way to personal relations. Further steps in that direction may well be left to the originality and initiative of the staff of the department.

# (2) HOURS

A century has passed by since Robert Owen put

During the there has been a tendency to shorten the

past century forward his theory that "in a pecuniary view 10} hours per day could be worth as much as 117." 2 The extreme theory among employers now is that working day. "the hours of women and girls should not exceed 48 per week," 8 even for overtime,4 and that for men "the normal hours" should be 48 per week.5 An employer who has adopted these hours speaks of their "practicability and economic necessity," 6 in language less cautious than Owen's. Yet even before the war there were factories where men worked 14 hours at a stretch on seven consecutive days, and an average of 12 per day throughout the year; and women, with the law's sanction, still worked 60 hours per week-occasionally longer.

<sup>&</sup>lt;sup>1</sup> Vide Hodder's Life of Samuel Morley, 1887, p. 203.

<sup>&</sup>lt;sup>a</sup> Select Committee, May 7, 1816.

Industrial Organisation, p. 267. Ibid., p. 148. Ibid., p. 161. <sup>6</sup> Ibid., p. 267.

In 1816 it was very exceptional for children to work only "66 effective hours in the week"; 1 and the contrast between those hours and the 82 or 841 hours worked by children in neighbouring factories must have been at least as striking as the present contrast between 42 and 60 hours for women workers.

The change of tone from Robert Owen's statement, "In a pecuniary point of view only, I would not again alter (i.e. increase) the hours," to a modern employer's remark on the "economic necessity" of short hours is indicative of the general change in industrial circles, a change due to the growing belief that shorter hours are economically beneficial. Its effect on legislation has been discussed; 2 we may briefly consider here why shorter hours pay, how far the movement in this direction seems likely to extend in the immediate future, and what lessons are to be learned from the special efforts to increase output made at the outbreak of war.

A century ago the only limit set upon the period Hours have of work in a factory was that of physical exhaustion, been limited in various and to this day there is no general legal maximum ways. imposed upon the work of men in factories. Indirectly, doubtless, the legal restrictions placed upon the work of women and children have affected the period of men's work, and in a more direct way Trade Unions have accomplished much in this matter. From the anarchy resulting from a laissez-faire policy, men passed to a deliberate struggle between employers and organised employees, and even unorganised trades reap the benefit. But one is forcibly struck by the primitive methods employed in deter-. mining the desirability or otherwise of limiting Experiworking hours. Doctors could be found who would ments to determine

assert that a child might work a dozen hours without the relation of hours to

<sup>&</sup>lt;sup>1</sup> Thos. Whitelegg, Select Committee, 1816, 78 James Lees, Son & Co., Oldham.
Part I, Chapter IV.

injurious effects,1 and statistics crudely collected

were produced to show that those who worked long hours lived long. On the other hand, a few stray employers asserted that they obtained satisfactory results with shorter hours; 2 but they were branded as philanthropists, and not regarded as disinterested witnesses. Recently, however, the subject has been treated more and more as one for scientific inquiry, until it is now in some cases regarded from a purely academic standpoint. Experiments conducted in laboratories have not yet enabled scientists to speak with authority on this matter, but in the past year the nation has been forced to undertake a huge experiment in the matter of lengthening hours, since, when war came, no possible means of increasing output could be neglected. It is too soon to judge finally of the results of this experiment; but the question is of such vital importance that it may be well to consider what has happened hitherto. After the first feverish rush it was found that, in at least two important districts,3 employers refused to allow overtime, even though the men were willing to work. The experience of a Crown factory is said to be "that any lengthening of the day beyond 6 p.m. and a total of 81 hours' work daily exhausts the workers and is of no advantage in increasing output."

The results

became imperative at

the outbreak

of war (1914).

<sup>1</sup>Robert J. Saunders, in his report of February 5, 1835 (Factory Inspection, 1855), says that "further personal inspection and examination of children" confirmed him "in the opinion that at 11 years of age 69 hours' weekly labour" was "not prejudicial to their health and spirits."

Many employers give similar testimony.4 The strain

<sup>2</sup> Vide Appendix II.

Leeds and Glasgow. Vide Factory Report for 1914,

[Cd. 8501], 1915.

The Factory Inspector's Report for 1914 is of unusual interest on this point; the following instances are taken from it:

<sup>(</sup>a) Wholesale clothier—1000 women on Government contracts—the full period allowed under the Factory Act, 8 a.m. to 8 p.m., is sufficient, and "any work beyond this is quite useless: it exhausts the workers and does not pay."

of overtime, however, is, in some cases, less than are rendered might have been expected. One inspector says 1 uncertain "she has been surprised to find so little complaint or ill-effect from long hours." She thinks that though this may be partly due to the better standard of living that the overtime money makes possible, it by the is mainly due to the ideal for which the women are psychological innow working. "It would revolutionise industry," fluences at she says, "if some ideal other than money could be work; inspired during times of peace."

Summing up the evidence the Factory Department collected during the first few months of the war, the Factory Inspector asserted that there had been no increase of sickness, but in many cases it

(b) Employer of 1000 women on War Office work "refused firmly to work them overtime."

(c) In Bristol—manager found that an hour and a half's overtime after 8 p.m. on three nights in the week had an injurious effect upon output, as well as upon health, if carried beyond a fortnight at the outside. Returned to normal hours; output and quality improved.

(d) Factory with 2000 women and girls; hours 7-6, reduced

to 8-5. Output remained the same.
(e) Leeds factory occupiers refused to work overtime, for (i) it was not financially beneficial (output decreasing while standing charges remained the same), and (ii) the women could not stand it.

(f) Powder bag factory — Glasgow — after some weeks piece-workers were making less during overtime than during

normal period of employment.
(g) Cardboard box factory—less than normal hours—but output and earnings the same.

(h) A biscuit manufacturer and (i) an apron manufacturer report as in (g) (k) "This firm have been working overtime continuously

for some months, but have found it absolutely necessary to stop it for a week, as the strain was becoming too great and the

number absent through illness was so large.'

Hours were extended, in the woollen and worsted industry, to cope with the rush of war work (6 a.m. to 8 p.m. from Monday to Friday with two hours off for meals, and from 6 to 2 on Saturdays with one hour off for meals); but after two months it was found that production had been gradually falling off, and employers were voluntarily reducing the hours. A General Order was made, allowing not more than 9 hours' overtime per week, and this proved satisfactory ([Cd. 8501], 1915, p. 57).

1 [Cd. 8501], 1915, p. 40.

was found necessary to reduce overtime because of the strain involved. "Looking at the question as a whole," he said, "it is probably safe to say that, whatever may be the future effects of so prolonged a strain, there is at present no sign that workers have been injuriously affected. There can be little doubt that the knowledge that they were taking an active share in the struggle in which the country is engaged, and feeling that they were thus 'doing their bit,' has enabled workers to carry on under conditions that in normal times would be insupportable. Employers too, in almost every case, have used their overtime in a restrained and reasonable way, and often provided free teas and refreshments for their workers." 1

He adds, however, in speaking of output, "Instances have repeatedly come to light where it has been found that production has gradually fallen away when long spells of overtime have been worked. . . . The men get stale," it is said, "and their tempers appears that are upset." ... "The whole experience of these last months leads unquestionably to the conclusion that while long and even excessive hours can be worked with advantage for short periods, continued overtime, if not kept within proper limits, soon fails in its object and ceases to aid production." 2

It will be noticed that the experiment which the nation has now tried is only that of returning to hours which had previously proved too long. Seeking a ready means of increasing output, it has glanced backwards, not into the future. War time may not be the time for experiments, and there is always much hesitation on the part of employers in de-. creasing the hours of work, for, should the change prove unsatisfactory, the return would be difficult. But in cases where working hours have been reluced to as few as 42 per week it does not appear

1 [Cd. 8501], 1915, p. 59.

<sup>a</sup> Ibid., p. 60.

but, speaking generally, it continued overtime does not proportionately increase output.

that the output is worth less per week than where the hours are 55. The value per annum is likely to be greater in the former case, and the difference in the value per lifetime is likely to be still more marked. No definite records have been kept over long periods, More and it might be well if some definite scheme of record-scientific keeping were devised by a scientific student of desirable. sociology, and applied by various factory occupiers; the results could then be analysed scientifically. The whole scheme would necessarily be of great extent, and a generation would not suffice for complete investigation, but in a year, possibly even less, some very definite results might be obtained. As matters stand, the whole question is left to a haphazard conflict or concord of opinions, and permanent industrial peace on such a basis seems impossible. We may notice a few of the experiments which, before the war, were being made in the direction of shortening hours. Dunfermline affords, perhaps, the best recent example. In this age of the paradox one is scarcely surprised to read that "the shortage (of female labour) in Dunfermline has apparently directly led to a shortening of the daily period of employment." 1 An 8½-hour day was established in all the linen-weaving sheds.2 This was a 15 per cent. reduction, and was accompanied by a 5 per cent. increase in piece rates, but no change in time wages. The less industrious among the workers made about The short the same as before; the best piece-workers lost about ing of hou 10 per cent., and grumbled at first, though after a different short time no one would willingly have reverted to workers differently the old hours. The fact that it is the best pieceworkers who suffer pecuniary loss when hours are shortened suggests that they may gain most in other ways; they may have been taxing their strength unduly. Those who have dawdled can do as much or

<sup>1</sup> Factory Report for 1913, p. 72.

Ten factories, with about 4500 workers.

even more in the shorter time, but those who have worked at top speed all the time have a rest forced upon them. This may, in the long run, preserve the health and strength of the best workers, who are of special value, to the employer as well as to the nation.

its effect on output and profits The report of one employer is that the wage bill increased about 12 per cent., while the turnover increased about 6.7 per cent. They obtained all the labour they wanted, and of the kind they wanted. They had less sickness, much less lost time, better work, and less expense for coal and gas. The employer least favourable to the change, however, said that the alteration had not succeeded in attracting more labour, and his output was 10 per cent. less. "He was of opinion that as soon as the other trades in the town felt the shortage of labour they would put up their wages, and that the only effect of the experiment would be an all-round rise in the price of labour."

Another experiment may be recorded, one made by a firm in 1890.¹ A reduction from 84 to 56 was made in the working hours of a firm which employed over a thousand workers. Before this, shift men worked from 7 a.m. to 6 p.m. and 6 p.m. to 7 a.m., with a double shift at the end of the week, so that once a fortnight each man worked 24 hours at a stretch; subsequently they worked from 6 a.m. to 2 p.m., from 2 to 10 p.m., or from 10 p.m. to 6 a.m., and the change of shifts was effected by two 12-hour shifts at the end of the week. Wages were paid per shift, and were reduced 10 per cent. as a precaution, though it was expected that nine men would do the work formerly done by ten. The number of men was therefore increased 35 per cent.² This would have

appears highly satisfactory

<sup>&</sup>lt;sup>1</sup> Times, February 7, 1895, p. 15.

<sup>&</sup>lt;sup>2</sup> Three shifts of 45 men each were expected to carry on the work which two shifts of 50 men each had previously undertaken.

made a 21 per cent. increase in the wage bill, but the actual rise in wage cost per unit in the first year was only 141 per cent. The following year wages were restored to their former level; and the wage cost per unit fell steadily, until in 1893 it was at the 1889 level.1 It was considered that the improvements which admitted of definite observation might "be summed up under the headings of greater regularity of attendance, increased application, and improved health." The men were reported to come to their shifts "regularly and . . . sober"; they were no longer found asleep on duty; and a lower percentage were on the doctor's books.2

Such results might be expected to follow the in the case c reduction of the hours from 84 to 56, but how far drastic reductions could this be continued? Some factories already of excessive work only 42 hours, and there seems little tendency hours. to increase hours once they have been reduced, except in times of national crises. It would be interesting The limit at to discover what would happen if piece-workers which shortening were given as much work as they liked to do, hours but only allowed six hours a day for five days a ceases to be profitable week in which to do it. Would they, after a time, do as effective work in 30 hours as they now do in 42? And how would it affect their health?

<sup>1</sup> Report to the Home Secretary by the Chemical Works

Committee of Inquiry, 1893. Cd. 7235 (Aug. 31, 1893).

<sup>2</sup> Concessions in regard to hours are sometimes made by employers to certain groups of their employees. The commonest concession is that made to young workers to enable them to continue their education. Another is that to women and girls, who are sometimes allowed to come a few minutes later and leave earlier than men. A special example of this is to be found in Redditch, where in needle and fishingtackle factories and workshops "married women are allowed to start work half an hour after and leave half an hour before the close of the ordinary working day . . . besides being allowed an extra twenty minutes' pause at the dinner hour" (Factory Report for 1911, p. 155). It is reported that although in this case corresponding reductions are made in the wages practically all the married women prefer it. Incidentally it is said to have been accompanied by improved time-keeping.

nas not yet been ascertained. The most practical attempts to ascertain the effects of altering hours of labour have seemingly been those of employers, made usually with a view to industrial efficiency.¹ It would be well if careful records of such experiments could be kept in a scientific manner; but often their originator is unaware of the far-reaching importance of his experiment, and even when he errs on the other side, and exaggerates its importance, he frequently fails to realise the necessity for care in recording every detail, and so defeats his own aim.² Frequently, too, his results are of no definite use to anyone except himself, owing to the differences in process involved.

Welfare Departments night do seful work n such esearch.

The Welfare Department of a factory might do work of far-reaching significance in this direction. At its disposal is all the available information as to the health and activity of each worker. The nature of the information collected and the use made of it depend almost entirely upon the head of the department. Remarkably few Welfare Secretaries seem to have tabulated their records. There is usually a separate record card for each worker, and occasionally one finds records of departments, but rarely does the secretary seem to have made out, for example, totals of "days lost" in each department, with the conditions of work therein at the time. The few that have been kept indicate that improvement follows immediate medical attention, but much more might be done if the whole were studied as an example of the reaction of work on workers.

<sup>1</sup> Vide Appendix II.

<sup>\*</sup>The Factory Inspector's Report for 1913 (pp. 59-60) says that "no better object lesson could be found" than that of the fish-curing industry, in which the results of shortening hours "have in all probability come as a surprise to the trade." The number of workers is not stated, but it is said that "in spite of reduced hours the output in a season by no means abnormally long was 25 per cent. in advance of all previous records." The vagueness perceptible in such statements may serve to indicate the difficulty of obtaining exact information.

In view of the limited amount of general information available and the lack of method in its arrangement, even in individual cases, it is impossible to give any decided verdict as to the effect of shortening hours of labour, but results seem to indicate that it does not reduce output proportionally, if at all. limit at which further reduction would be harmful has not been ascertained, but it is conceivable that too little time might be left for acquiring proficiency.

There are at the present time employers who consider it cheaper to pay a fine annually during the seasonal rush than to alter their hours in conformity with the law. But these are exceptions. On the whole, short hours are associated with successful factories, and the two may be causally connected.

The psychological effect on the workers of any reduction of hours renders a purely physical estimate of results inadequate. The distrust which usually haunts the minds of any workers when their customs are broken expresses itself unconsciously in their movements. If a reduction of hours from 8 to 6 were made without any stated reason, they would probably think that there was a shortage in the demand, and they would perhaps be slow in order to prevent further reductions. If a reason were given, it would necessarily influence the result. This is a seemingly The reason insuperable difficulty in attempting any generalisation given for a reduction in as to the effect of altering hours. Even if it were hours inpossible to permit factory workers to go when they fluences the had finished a definite took there is had finished a definite task, there is no guarantee that the work would be done as quickly as possible, for they are always on guard against the unknown, and possibly compromising, motives of the employer. Experiments can perhaps be best carried on when guarantees have been given by the employer to the employees; but even then success depends upon their confidence in him, and upon the attitude of both to the outside world.

The legal maximum seems too high.

Experiments have then so far served to show that output and hours are not in direct proportion, but they have not yet shown with what hours the output reaches its maximum per day, per month, per year, or per working life. Results tend to suggest, however, that the legal maximum is still too high.

In estimating the advantages or disadvantages derived from shorter hours, attention is apt to be concentrated upon wages. But the question of strain is of vital importance, and involves that of speeding up. The same amount of work may conceivably be accomplished in nine hours as in ten, and the wages received may possibly be the same; but what is the The question effect on the worker? The whole question is very of strain and complicated, and curiously little is actually known about the relative amounts of fatigue occasioned by

speeding up

long hours and by speeding up during short hours.1 The choice as presented to a worker is rarely a simple alternative between longer or shorter hours. In one factory where many experiments have been made, men paid per hour unanimously voted for a 50-hour week, at the same wage per hour, in preference to a 45-hour week. That was a fairly straightforward case; no question of speeding up was involved, the men were skilled workers, protected by a Unioh, and, in fact, paid above Union rates. Over and over again, however, one hears of piece-workers losing nothing by shortened hours, while those who are paid by time have their wages reduced even though they are expected to maintain the output.2

It is normally cheaper for the employer to run his machine nine hours instead of ten for the same output; it is conceivable that with properly adjusted. intervals for rest, it is less strain for a worker to pro-

<sup>&</sup>lt;sup>1</sup> Vide J. C. Goldmark, Fatigue and Efficiency.

<sup>&</sup>lt;sup>2</sup> Compare Factory Report for 1910, p. 114, and for 1911, p. 154.

duce the same quantity in a nine-hour day than in a ten-hour day; but, even so, why should the return to the worker be reduced while that to the employer remains constant? This is the question as it presents itself to the workers. The economic aspect of the must be conproblem is inevitably the most conspicuous; but, sidered, rightly understood, it involves the question of strain. The effect of excessive strain must be considered from the point of view of the worker, the employer, and the nation. Even if employers and employees agreed to work short hours at high pressure, the nation might eventually suffer thereby. Attention has always been centred upon wages, but the workers have necessarily been more long-sighted than the employers, because for them the economic advantage or disadvantage affects their lives as a whole, not merely their lives as workers. It may be to an employer's advantage to work them either long hours, or short hours at high pressure, and, having done so, to scrap them when worn-out. But they themselves must consider all the years of their own lives, and thus they approach more nearly the national standard of economic merit. Yet the nation's economic in-and the nation's interest in future generations often has little in common terest in tha with the immediate economic interests even of the respect. workers; the nation unwittingly relies on individual parental instincts, which often conflict with individual economic interests. With an increase of knowledge and an abandonment of abstractions, it might prove that the vital interests (if not the economic interests) of all would coincide.1

In considering strain, not only is the number of hours per week or per day of importance; their

<sup>&</sup>lt;sup>1</sup> Though the published statistics are exceedingly suggestive, I think they should be supplemented by the analysis of the records of large individual firms or groups of works whose hours and meal-times are similar and where the conditions of work are definitely known" (G. W. Ramsbottom, "Fatigue," Economic Journal, xxiv., 1914, p. 401.

Practice in regard to spells and intervals varies greatly. grouping has an important effect upon workers.1 Custom controls to some extent the length of the working day, and still more the arrangement of spells and intervals within that day. There are distinctly different traditions in different parts of England; work before breakfast, for example, is greatly disliked in some districts, while where it is the rule attempts to change it often meet with opposition from the workers. Generally the employers' idea seems to be to avoid the break in the work; for it is at such times that discipline is strained. Moreover, at first sight it appears cheaper for employers to run their machinery for two spells rather than three of twothirds the length. Starting and stopping entail considerable loss of mechanical power, in addition to the loss occasioned by the inability of the workers instantly to get into the full swing of work. The best arrangement of work-time and leisure is still a matter for consideration. The fact that the time taken to recover from fatigue is not in proportion to the time spent in work, is now scientifically established,2 and with care it should be possible so to regulate the length of spells that the maximum amount of work is associated with the minimum of fatigue. The value of the work throughout the spell should be considered, not merely the total output and the duration of the spell. Short spells, in spite of the breaks involved, may yet prove to the economic advantage of the employer, because of the high level of efficiency which it is possible to maintain when the workers are never The matter is, however, still left to chance or to custom in the majority of cases. There is certainly a dislike of innovations in this respect. Where employers have tried to abolish work before breakfast, they find considerable dissatisfaction. They

Usually arrangements are left to chance and tradition.

<sup>&</sup>quot;The essential thing in rest is the time at which it comes" (J. C. Goldmark, Fatigue and Efficiency, 1912, p. 88).

<sup>&</sup>lt;sup>2</sup> Vide J. C. Goldmark, Fatigue and Efficiency.

suggest, in explanation, that, in addition to mere dislike of change, workers like to be sure of a comfortable breakfast hour (or rather half-hour), and that they are not sure of this unless they have been obliged to work before breakfast; and further, that the wives of workers object, because they like to get their husbands' breakfasts in peace after they have dispatched the children to school, or to lie in bed a little longer if there are no children to compel them to rise early. These are reasons given by employers; but they are ridiculed by workers. It would seem but a fivethat the lengthening of the spell is in itself distasteful hour spell is to the latter, who dislike any change which it is to the latter, who dislike any change which involves a recognised five-hour spell.1 The five-hour spell permitted by as excessive. law is coming to be generally recognised as too long, and is frequently broken by the voluntary arrangement of the employer. Whether or not refreshments are provided, and whether or not they are free, are matters of detail; the important thing is the actual break in the deadening monotony of the task. practice it is the most mechanical tasks which are the most tyrannically monotonous; many workers perform just one short set of movements over and over again for nine or ten hours every day. The most wearying monotony is that in which the worker is but an adjunct of a machine, and is bound to keep in time with it from start to finish, varying neither the movements nor their order nor their time. Change of any sort is a relief-change of material, change of colour even; but a cessation of the changeless course of action is the relief which all desire.

Careful time studies were made of the work of the By careful girls in a department where the work, though not investigapurely mechanical, was considered specially strenuous; difficulties

<sup>&</sup>lt;sup>1</sup> With certain exceptions no woman or young person may be overcome. employed continuously for more than 4½ hours in textile factories, but in print works, bleaching and dyeing works, and non-textile factories and workshops even children may be employed for five continuous hours.

and toward the end of a five-hour spell a marked slackening was noticed. It was decided, therefore, to make a break of ten minutes and to supply them with milk, and the result was found to be fairly consistent work throughout. It is believed that it may prove an economic advantage if the workers are never allowed to overwork themselves, even for a short time. The quality of the work is affected even more than the quantity; and by progressive firms quality is realised to be a matter of first-rate importance. Workers seem to detest five-hour spells, and for this they are harshly criticised by many people who never worked for five consecutive hours in their lives. To lunch at one and wait till after seven for tea may not be a hardship to some people, but by the average worker it is greatly disliked, and many little breaches of discipline may be attributed to this. In the East End of London, girls engaged in the manufacture of food 1 go to the unattractive lavatories for a break in their work and for a little food during the second five-hour spell. That happens in a factory where the discipline is intended to be strict, but elsewhere "many a manager or overlooker turns a blind eye to the 'snack' that is taken at the working bench." It is often feared that goods will be damaged if food is permitted in the workrooms, or that too much time will be taken if a nominal ten or fifteen minutes' break is allowed. This is largely a matter of general factory discipline. There is no law against the five-hour spell,<sup>2</sup> and there are many workers who do not formally object to it (even though they surreptitiously break it); but by the majority it is cordially disliked. If no change can be effected by persuasion, the inspector "can do nothing but explain the legal position to the workers and note their disappointment." 3 Com-

<sup>&</sup>lt;sup>1</sup> At 9s. to 10s. per week.

<sup>&</sup>lt;sup>2</sup> Except in textile factories.

<sup>\*</sup> Factory Report for 1911, p. 155

paratively few factories allowed a break for breakfast Many ninety years ago. Three out of forty-six factories in different arrange-Stockport were cited as so doing.1 A good many of ments are the larger factories have now a break in the afternoon, made. and a few have a morning break for lunch, even though the spell is less than five hours. A break of seven or ten minutes at ten o'clock is granted in several cases. Sometimes all work is stopped during that time, but more usually the break simply takes the form of permission to take food. Often tea is brought round at such a time, and supplied free, or for a price such as 2d. per week. Perhaps the extreme development of the granting of intervals for rest is to be seen in a biscuit factory, where the boys attending the ovens are allowed spells of twenty minutes after every twenty minutes' work. It is possible that considerable use could be made of this free time for education, but so far it seems nothing has been done, and other dangers are introduced by granting an excessive amount of liberty. Given spells and intervals of specific lengths, the time of day at which they begin and end is of some importance. There is a tendency to begin work later, especially in factories where women are employed,2 and in some cases hours are varied in summer and winter. Two cases may be cited in which the alterations are in opposite directions. One firm works only 44 hours per week during the three winter months, thus economising lighting power, while to make up the average hours to 8 per day they work 49 hours per week during the summer. The second firm works 401 hours per week from April to September, and 501 hours during the winter, the idea being to allow time for outdoor recreation during the daylight.

In many cases there seems a growing desire for

\* Vide Factory Report for 1913, p. 60. -

<sup>&</sup>lt;sup>1</sup> Vide an anonymous Shetch of the Hours of Labour, Meal Times, etc., in Manchester and its Neighbourhood, 1824 and 1825. Manchester.

free Saturdays. Where hours are as few as 42 per week, it is possible to work on five days a week only, and this arrangement is likely to be distinctly pleasing to all concerned. Perhaps it is most easily made in laundries, but it is not considered an impossibility in large factories, even where the hours are more than 42 per week. In at least one laundry, Saturday work is regarded as a punishment for lateness on other days. This brings us to a consideration of holidays.

Where holidays have been granted,

on suitable conditions,

the results have been excellent.

addition to the statutory holidays, many employers now allow their employees a week or even a fortnight's holiday during the year. This is not necessarily a boon to workers, for it may be of the nature of a temporary lock-out, and the loss of wages may be an important matter to those whose living is practically from week's pay to week's pay. However, if it is foreseen it can be provided for, and in some factories the holidays are paid for at the same rate as the weeks immediately preceding. Occasionally and paid for double pay is given to enable the worker to take a holiday away from home. To such payments there are usually attached conditions with regard to conduct, time-keeping, or workmanship; and it reported that by this means great improvements can be obtained. Where fines have failed, the prospect of a good holiday has succeeded; and with the memory of a good holiday the result, it would seem, is intensified, for the improvements are progressive. One example may be cited. In 1884 a scheme was first put into effect whereby "steady men" (defined as those who lost not more than ten days in the previous year) received an annual holiday on full Forty-three per cent. earned it. By 1907 the definition excluded all who had lost more than two days in the previous year, and yet 97½ per cent. earned their holiday. The Chairman of that Company said at the Ordinary General Meeting of 1908, "In

1. Vide Factory Report for 1913, p. 107.

the old days, when we very mistakenly expected men to work 365 days a year, the rule was that a man would work on and on until he could work no longer through exhausted nature, and then he would spend some time away from our employ in ways that did him no good. And at the end of that period, when his money was exhausted, he returned a very much worse man than when he left. Nowadays . . . they have their fixed week's holiday, no longer a fixed week's wage, but, for the last six years, two weeks' wage to go away with for the week's holiday; they are steady throughout the year, and they come back much the better and the fresher for their holiday." 1 Similar systems applied elsewhere have proved as successful, and one firm states that "the percentage of men entitled to holidays in the different departments is found to vary in direct proportion to the efficiency of the department."

Occasionally there is no condition attached to the payment of a holiday bonus except that a holiday be taken; but to grant an annual week's holiday on full pay to all factory hands, subject to certain conditions, is becoming of quite frequent occurrence. Sometimes a fortnight is granted to those whose association with the firm has been of long standing. One still finds, however, in some cases statements such as the following, made by a Company that grants holiday pay only for Christmas Day, Good Friday, and the August Bank Holiday: "It must . . . be distinctly understood that the payment for holidays is entirely optional on the part of the Company and may be given or withheld in all or any cases they may think fit." Such a statement deprives the payment of any effect as a reward for fulfilling the conditions attached, besides being calculated to raise antagonistic feelings in spirited employees.

<sup>&</sup>lt;sup>1</sup> It is worth noting that in this case shift men do not get Bank Holidays, and day men are not paid for them.

Unpunctuality Holidays are not the only "rewards" offered for punctuality. For example, in one case the rules given to employees state that at the close of the financial year the following rewards will be paid:

"Where wages

are 6s. or under, the employee will receive 5s. less 1½d. for each time late.

exceed 6s. but do not exceed 10s., the employee will receive 10s. less 3d. for each time late.

exceed 10s. but do not exceed 15s., the employee will receive 15s. less 4½d. for each time late.

exceed 15s., the employee will receive 20s. less 6d. for each time late."

Sometimes rewards are higher—"5s. each quarter for perfect time," and 7s. 6d. extra for four consecutive quarters; and in one case the reward is in continued arithmetical progression from 1os. per quarter with a 2s. per quarter increase. One man thus received £5, 18s. as one quarter's prize, which meant nearly fourteen years without one avoidable loss of time.

Quarterly payments are reported more effective than yearly payments, and occasionally weekly rewards are given for perfect time; but the scheme for holidays seems on the whole preferable to and more effective than mere "rewards for punctuality". It has a reasoned basis, and that in itself is satisfactory. It can only, however, be arranged annually, which is a slight drawback. In the large office connected with one factory a second half-holiday per week is granted to all clerks whose time has been perfect and whose work is up to date.

and irregularity The importance of regular time-keeping, of health and punctuality, is just suggested by the fact that almost 3 per cent. of the time of some 3000 girls in one factory is lost through sickness and unpunctuality.

If a week's annual holiday, which represents about 2 per cent. of the time, could reduce this loss by one-half it would probably be profitable to the firm, because of the greater efficiency of the workers during the rest of the time. Workers stick to their work when really not fit to do it well, if leaving it involves want. Of the effect of the hours of work both on can be imhealth and discipline the Welfare Department of proved by an a factory should be able to speak with no uncertain Welfare Devoice. Moreover, there should be careful super-partment. vision of all intervals of leisure that are spent in the factory. The convenience of the workers should be studied in every case, and their tastes consulted as far as possible. One thing essential in a Welfare officer is the eye which sees their needs. There is perhaps no more practical way of raising the whole tone of the factory, and the standard of comfort among the workers, than making their brief intervals of leisure miniature rest-cures, free from any element that might irritate or degrade, real oases in what it is to be feared many of them still consider a desert.

## CHAPTER IV

### INCIDENTAL AIDS TO WELFARE

WE pass now to the consideration of those incidental aids to the well-being of employees which, just because their connection with factory life is less obvious and intimate, have attracted special attention from the public, and have come to be popularly regarded as Welfare Work to the exclusion of the more fundamental matters of wages, hours, and workroom conditions whose importance we have already noted.

The arrangements made specifically for the welfare of workers may be conveniently considered under three heads, according to whether they affect

- 1. Their physical well-being;
- 2. Their mental development; or
- 3. Their personal dignity.

The three are, of course, intimately connected with each other; they are not always directly related one with another, and may even appear conflicting. Hence arise many complications, and the devoted energies of well-trained experts are needed for the solution of the problems involved.

#### I. PHYSICAL WELL-BEING

## (a) Health

There are few legal provisions regarding health of factory workers

Provided that the worker be normal and the work be not of an especially dangerous nature, the legal supervision exercised over the health of factory

workers is slight. The younger employees are certified as fit upon admission, and thereafter nothing is done, unless a worker is actually ill and must have leave of absence. Of course, there is a certain amount of supervision as to the sanitary and other arrangements of the factory itself, but as far as the individual worker is concerned, there is normally none.

The proportion of factories in Great Britain in which specific Welfare Work is undertaken is small, but it is not an unusual thing for employers to retain the services of a doctor for their employees. but doctors Occasionally as many as three doctors are engaged for their full time by one firm, in which case one at least is usually a woman. More frequently than doctors, trained nurses are to be found in factories. A nurse is sometimes in constant attendance at the or nurses are factory in case of accident or sudden illness; some-frequently engaged by times she is expected to visit the homes of those who employers, are ill and give help there as best she can. Such help can be tactfully given, and is usually welcomed; it does not seem to arouse any feeling of unwarranted intrusion upon the privacy of the home. Occasionally employers subscribe to the funds for the support of district nurses, instead of retaining a nurse of their own. Similarly, the firm's doctor is not always a fulltime officer; indeed, only the larger factories can afford that; in many cases the doctor attends at the factory one or more hours per week, or even an hour per day. Sometimes a fee is charged—"6d. for three months," for example—but more usually attendance is free, and medicine is provided at a very low rate. A worker who wishes to consult the doctor puts his name on a list, and is called from his department with benewhen the doctor is ready to see him. The doctor's ficial results, help in case of accidents is doubtless an advantage, but first-aid treatment from a trained nurse is much more frequent, and the benefit accruing from it is very great. The insistence with which men are

compelled to report "mere scratches" is often very annoying to them, but is reported to be accompanied by a decrease in blood-poisoning.

though there may be exceptions.

Both workers and employers usually benefit by such ar-

Of course, certain critics allege that first-aid is but a flimsy cloak for bad conditions, that to retain a doctor is to have expert evidence always available in case of legal proceedings, and that shares in a very profitable company blind even a medical man to very insanitary conditions in that company's factory. Such criticism may not be wholly unfounded, but it is of exceedingly limited application. The fact is that the presence of a doctor, or even a nurse, on the premises reduces the loss of working time through illness or accident. It saves journeys to and fro, and rangements, by securing prompt medical attention it often averts a serious breakdown. That this is no slight gain, both to employer and worker, may be judged from the experience of a lady who set up a "hospital cupboard" in the neighbourhood of several East End factories far from a hospital. She said it generally involved missing half a day's pay if a girl went to a hospital, and from the employer's point of view that means irregular work, and less than the possible output. "Strangers would be surprised," the lady said, "how much we use our hospital cupboard.... I really think the girls are more grateful for this than anything else, and we find that now we go to our hospital cupboard every day we do not get the very bad poisoned fingers and feet as formerly." 1 That was written of a very poor neighbourhood, where the labour was badly paid and where, presumably, efficiency had not been brought to its level in a good factory. In many of the larger factories there is a first-aid cupboard in each department. interesting to note that, though the law makes no demand for treatment (except in certain dangerous industries), H.M. Medical Inspectors of Factories

which receive encouragement from inspectors.

<sup>1</sup> Miss Jean Price, p. 13.

have seen fit to issue definite suggestions for rendering first-aid in factories, with a view to preventing subsequent septic infection or blood-poisoning. instructions are given in Appendix X. Special emphasis is laid upon the instruction not to wash the wound; and, if convenient dressings are at hand, the treatment is very simple. Cabinets of first-aid dressings for use in factories are specially prepared by several manufacturers, and an increasing number are to be found in workrooms. Generally, too, in larger factories there are workers who have had some training in ambulance work; for in many cases, before thewar, classes were held each winter. Workers who superintend the use of first-aid cupboards are sometimes paid a small annual sum in recognition of their services. But apart from questions of accidents, there is the far more subtle question of strain. A Welfare Secretary must needs give special attention The Welfare to those operations which are liable to produce a must guard There is no regulation which prevents the workers women from lifting weights of 70 lb., or even a strain. hundredweight, and such weights are commonly lifted in many factories. But in some cases the greatest care is taken to minimise such dangerous work. Workers themselves are frequently able to suggest ways of avoiding lifting, pushing, or stooping, and in many cases their suggestions are gladly carried A very important factor, for example, in the comfort of workers is the height of the table or bench at which they work; a little consideration can often discover a way of adjusting this to suit the individual, by means of stands or in other ways. A watchful eye can discover numberless ways in which the comfort of the workers (and so their efficiency) can be increased.

Not infrequently a worker feels ill while at work.

<sup>1</sup> In one case such classes have been held for twenty years or more.

Women and girls especially are liable to feel the strain unduly great at times. In many cases restrooms are now provided for such foreseen emergencies. These rooms are commonly very unpretentious, but the essential thing is to have somewhere to go, away from the noise and hurry of the workroom, and the trying, though kindly, observation of other workers. Rest-rooms where provided are probably little abused, and they are greatly appreciated. Where there is a Welfare Secretary or a nurse, she does anything she can for the sufferer, advises as to going back to work or going home, and provides water or medicine as may be required.

and arrange for Convalescent Homes,

Frequently neither attention at the factory nor in the home is sufficient to restore the worker to perfect health and strength, and in various ways arrangements are made for hospital treatment or for a period in a convalescent home. An increasing number of firms have a convalescent home of their own, and many of these keep it in use all the year round, sending there, from time to time, the workers most in need of a rest. In some cases such homes are provided gratis, but more commonly there is a small charge made. One home, which began in 1880 with accommodation for six girls, now provides for twenty, and this particular type of Welfare Work seems to present fewer stumbling-blocks than almost any other. appears in many forms: sometimes it is nothing more than a bed or two maintained in a public convalescent home; but the most successful ventures seem to be those which are run by the firm itself, on simple, homely lines. As an example may be taken a "Holiday and Convalescent Home," which is some. seven miles out of the town in which the factory is situated, and can accommodate eight girls. Here one of the Welfare Department officers lives with a housekeeper. All have meals together, and the housekeeper takes a delight in the girls' enjoyment

of their holiday and in seeing them regain health and strength. The girls pay 4s. per week towards the cost, although special arrangements are sometimes made for girls under sixteen, who are outside the Insurance Act. Such a home can be of continual benefit to the workers. In many ways it is of more value than larger "Holiday Homes," kept empty "Holiday most of the year and used only for the annual holiday Homes, of about forty girls at a time. Such homes are sometimes owned by two or more establishments conjointly, but forty girls, together with "seven ladies and two maids" to look after them, will not be likely to gain as much permanent benefit from their fortnight's holiday as they would in parties of eight in five successive fortnights; and the strain of looking after them will be much greater. Sometimes country cottages are in use all the year round, sometimes during the six or seven warmer months only.

In this connection may be quoted two extracts from a Handbook for Employees of a firm which repudiates the idea that it does anything in the way of Welfare Work:

"Any employee requiring a change of air after illness will be sent to a Convalescent Home, the firm paying all expenses."

"Any employee wishing to have a week's holiday at a Seaside Holiday Home can do so, the firm paying

all expenses excepting railway fare."

"Need" and "desire" are made the criteria. has a hint of Utopia about it, but it seems to work very well; indeed, it works so smoothly that there is no noise about it. It is part of the ordinary round of factory life.

Beds in hospitals are frequently at the disposal of and hospital employers in recognition of their subscriptions, but treatment. factory workers themselves often subscribe as well. The subscriptions take many forms—an hour's pay to the Hospital Saturday Fund once each quarter;

a weekly collection throughout the factory; proceeds of concerts, dances, or whist drives; a penny each per fortnight; and so on. Not only does this provide an outlet for the natural generosity of the workers, but it gives them a feeling that they are not entirely dependent upon the charity of others if the necessity arises for them to go to a hospital.

Several Welfare Departments send books to workers who are ill, and change them from time to time throughout the period of convalescence; and one Co-operative Society, its members being guided by their own needs in times of illness, lend their sick employees various appliances such as bed-rests or air-cushions. The fact that many of the co-operators are in positions similar to those of their employers makes their estimate of the needs of invalids especially suggestive.

There are a few other instances in which invalid appliances are lent out to workers, one being in connection with a trust fund bequeathed by the founder

of the firm and managed by a committee.

Dentists are sometimes employed. Dentists are now engaged by many employers to look after the teeth of the workers, but even those factories which have one or two full-time dentists find themselves getting behindhand in the matter. In the most extensive systems special files of dentistry cards are kept, and workers are called to the surgery in the order of the urgency of their needs. In most factories where dental services are given to the employees there is a well-qualified dental surgery; but this is not always the case, patients having sometimes to go to the dentist's own rooms. Even so,

¹ Practice varies considerably: sometimes new-comers have their teeth put in order; sometimes attention is only given free to those who have been with the firm a year or more. As a rule no deduction is made in day wages for time spent in the dentist's room, and in some cases a time wage is paid to piece-workers to cover their loss. Workers are generally expected to pay at least half the cost of artificial teeth, though they may often do so in weekly instalments.

the time lost is sometimes paid for. Of those firms which refuse to accept any applicant whose teeth are not in order some offer dental services free, while ome expect the applicants to make their own arrangenents. The fact is that looking after the teeth of a large staff of employees is a serious undertaking, and is never as complete in practice as in theory. The provision of tooth-brushes and dentifrice gratis or at a low price is a comparatively simple matter, out really adequate dental attention has hardly been provided by employers, though a great deal has been lone.

# (b) Recreation

Facilities for recreation and social intercourse Arrangenay be arranged mainly by the employees themselves, ments made for workers' or by a Social Secretary, or by both together. Broadly recreation peaking, it is well to encourage the initiative of the vary. workers, but to rely on it entirely is perhaps to expect too much of those who have had little or no opportunity of managing anything on a large scale. irrangements made for recreation in connection with a modern factory are often very elaborate, and i brief general account of a few systems at present in operation may be given. First we may take that of i firm which makes membership compulsory; second, irms which allow workers the option of becoming nembers; third, typical Co-operative Social and Recreative Clubs.

1. In the first case a condition of employment, said Where :0 have been suggested by the workers themselves, membership of the Res that of joining the Recreation Club, and authorising creation Club deduction of a penny per week from wages. This is a condition of emgives the Club an income of about £600 per annum. ployment, 'The Recreation Club is entirely self-supporting. . . . The Firm in the first instance lent the capital some [1200 to [1400] necessary to provide pavilion, powling greens, athletic equipment, etc., and this

employers often retain the control. capital has all been repaid"; yet "The Chairman [of the company], the Deputy Chairman, and one of the Managers, together with two of the men, are trustees, and act as an Advisory Committee on financial matters." They have a right of veto only, and the two representatives of the men serve for a three years' term, with the right of re-election. They must not, however, be members of any other committee connected with the Club. The secretary of the Club is appointed by the firm; he is, in fact, the Social Secretary. The firm nominates three men, whom the employees choose one as chairman of the Club. The treasurer is the firm's cashier. Of the auditors, one is the firm's nominee, the other is elected by the members. It will be seen that the firm can exercise a very great measure of control over the Club. A further control seems to be exercised in other ways; for example, if the band is hard up for a man who can play a certain instrument, the firm engages a performer whether or not he be capable of filling a vacancy in the factory. Such is apparently the custom, and its effect is to produce an imposing band, which accepts professional engagements, but is too costly for the entertainments of the Club itself! A further trouble in this Club seems to be that certain sections tend to get more than their share of the income. It was pointed out that very little was done for the girls, and the men thereupon suggested that the girls should "hold an indignation meeting." The Club does not run very smoothly, and apparently the reward is to the strong. Regarded as "Welfare Work," it seems anomalous that the employees should refund the capital spent upon grounds, buildings, and equipment, which nevertheless remain the property of the employers, and that the company should exercise control over the funds which are subscribed by the employees themselves.

2. (a) On somewhat similar lines, except for the where matter of subscription, is the Recreation Club of membership is optional, another company. The "supreme management of the employers' Club" is "vested in a Council appointed by the influence may still Directors" (the number of Councillors not being prevail, stated) "and four Representatives elected annually by the general body of members." The appointed members do not attend the meeting very often; the "power of the purse" is retained, otherwise practical self-management is permitted. The subscriptions vary from 2s. 6d. to 7s. 6d. per annum, according to the number of sections joined, and there are about a thousand members. A pavilion, containing a hall, reading-room, and library, was erected at a cost of £12,000.

(b) In another case the annual subscriptions are as follows:

				2	' Ge	nts.	" Ladies.	" Lads under 17.
					s.	d.	s. d.	s. d.
"Cricket					4	0		26
"Cricket Prac	tice				2	6	••	16
"Tennis.					4	0	26	••
"Hockey					3	6	2 0	2 0
"Football	•	•			3	6	• •	2 0
"Cricket and			•		6	6		• •
"Cricket and			•	•	6	О	••	36
"Tennis and			<u>.</u>	٠.	. 6	0	• •	••
"Cricket, Ter			Footl	al		6	• •	• •
"Cricket and			•	٠	6	0		• •
"Tennis and		tey	•	•	6	0	36	٠٠
" Full Member	r		•	٠	10	6	• •	••"

The subscription of each section is determined annually by the Management Committee—elected by the Directors. "The Pavilion, Gear, etc., and all accessories appertaining to same" are to "be recognised property of the Firm, who shall have power if necessary to frame rules for the using of same, and to whom application [is] to be made formally by each branch of sport." The Management Committee and the Finance Committee consist of Directors. The

General Committee is elected by the Club members; officers of the Welfare Department are on this Committee, and it may reasonably be supposed that their relation to the firm influences their election. From the personnel of these committees it follows that the control exercised by the firm is very great and very direct.

but sometimes arrangements are left entirely to the workers. (c) In a third case in which membership is voluntary, the Club is governed entirely by its members; the firm gives whatever assistance is desired, but the arrangements are left to the workers. The subscription is fixed at one penny per week (halfpenny for those under 18). The firm permits this to be deducted from wages. It includes the fee for all sections (cricket, football, tennis, swimming, and several others), the subscription to the works magazine, and tickets for two annual entertainments. Instead of a penny per week, a "Composite Fee" of 6s. per annum (5s. for women) may be paid; the payment of this fee entitles a member to attend two additional entertainments.

C.W.S. factories have arrangements of their own.

3. We may now consider a Recreation Club in one of the Co-operative Wholesale Society's works. The annual subscriptions are thus stated:

		s.	d.
"Employés (Males)		0	Ğ.
"Employes (Females) [sic] .		0	3
"Relatives of Employés .		2	6
"Honorary Members (Friends)		5	o'

#### The sectional fees are:

" Bowling					1	6
" Cricket					2	0
" Football					I	6
"Orchestra		•		•	0	6
" Photograph	ic			•	I	0
"Swimming					0	6
"Cycling		•				ee
"Rambling	•			•	Fı	ee ''

The Society grants £10 per annum, and there is a right to make a levy on members in exceptional cir-

cumstances. Charges are made for dances and whistdrives held in a room provided for employees. From the money thus obtained, the Club, in addition to paying its way, makes grants to charities. It is governed by an Executive Council, two men being elected annually from each department. They elect the officers, but if any Councillor be elected to an official position he must resign, and his department elects another representative; for "No officer shall vote on any resolution before Committee." Councillors must be employed in the departments they represent, and the President, who is elected annually, is entitled to preside at all meetings—this apparently being the manager's chance. That considerable amusement is extracted from the business meetings of the Club is suggested by the following regulation: "Three members shall be elected as Auditors at the Annual Meeting. . . . They shall receive 2s. 6d. each for their services, and reasonable refreshments." The secretary is paid 15s. per quarter; his assistant, 5s. per quarter.

In another C.W.S. factory, the Social Club has grown up round a Dramatic Society which gave an entertainment in aid of a sick employee. The subscription is a penny per week, and about half the employees are members. The principal part of the income, however, is derived from dances and whistdrives, which are held monthly for eight months a year, the charge being 9d. each. The Club's orchestra, conducted by a packer, plays; and the members present each receive a box of chocolate or two cigars, in addition to refreshments. per annum is given to charities by this Club. The Committee of twenty is elected by ballot, the manager, who is a very active member, being invariably elected President. It is probably due to the President's influence that sections such as the Dramatic, Choral, and Orchestral prosper better than

outdoor sections in this Club. The pride of the Club is still the Dramatic section, which produces Shakespearean and modern plays, with a labourer and a skilled worker in the principal parts. In this Club, members of the office staff and factory hands associate on equal terms, and the manager's influence is very great. This is probably due to his strong personality; he is, unconsciously, a beneficent tyrant, by whose side humbler workers seem dwarfed and insignificant.

To avoid excessive interference is difficult for strong in positions of authority.

There are, then, two distinct ways in which the initiative of employees may be handicapped, (1) by the masterful control of the finances of the Club, personalities; and (2) by the dominance, whether conscious or unconscious, of a strong, confident personality. The danger of the former is greatest in the case of large successful firms; the latter occurs in some cases where there are professional Social Secretaries, but is as likely to occur whenever a person in authority takes an active part in the work. Only a very wise manager can share freely in the social activities of the employees without dominating them. Yet some employers, and some Social Secretaries, are capable of effacing themselves when occasion warrants it. The temptation to impress everything with the stamp of one's own personality is doubtless great, but to encourage the development of personality even in the humblest employee is the professed aim of many employers, and the naïve statement of C.W.S. employees may suggest a similar ideal. Their object is "to promote the recreative and social wellbeing of the employés by means of games, entertainments, etc., as the Committee may deem advisable." Nowhere is the temptation to put things right, even by coercive methods, stronger than where external criticism is feared or external approbation desired. Uniformed bands and fire brigades, even sports, and works magazines, can be, and sometimes are, used as advertising media, and even the most public-spirited

Clubs intended for display or for advertising purposes

employer or the most devoted Welfare Secretary must be sorely tempted to soften the crudities which are bound to result from the efforts of untutored workers. It is not yet commonly recognised that the value of educative effort cannot be estimated by the finish of its by-products. The neatness of a drawing rather than its imagination, the spelling of an essay rather than its originality, are still the customary criteria of a child's progress; and, similarly, in a factory the idiosyncrasies of individual employees are frequently discouraged, partly through lack of understanding on the part of employers and Welfare Secretaries, partly through fear of countenancing anything that may be ludicrous, and partly because of the large numbers involved. Speaking generally, are of little it may be said that the Clubs which provide the best benefit to the workers. recreation for the workers have least to show the world.

When a factory Recreation Club is inaugurated there follow inter-departmental contests of various kinds; and as soon as factory teams, bands, or brigades feel strong enough to face others, interfactory contests are initiated. These are frequently of rather an informal character, but they sometimes give rise to definite Workshop Leagues, with specific rules and regulations, membership of which is not always confined to factory Clubs, but may include, for example, tramway or post-office employees' Clubs. The effects of such inter-factory contests are as varied as those of the factory Club itself. The contests may become little more than agencies advertising for workers. In one extraordinary case a gentleman who employs several thousand workers has, possibly with the best will in the world, converted their sport into an object of scorn by the means he has adopted to encourage it. In point of fact, however, this employer may be only a little more frank than many others; his curious arrangements with regard to the

Cricket Club are here given. "As a stimulus to members (of the Cricket Club) to take an interest in the welfare of the Club, and as a reward for good play, Mr. X. gives one halfpenny for each run scored from the bat. Half a crown to any bowler who takes three wickets in any one innings. Five shillings to the bowler who takes three wickets with successive balls. . . . Five shillings to the Club Funds for each win, and half a crown for each draw . . . a prize of not less than fifteen shillings to the batsman who heads the batting averages, and the same to the bowler at the head of the bowling averages. a further incentive . . . Mr. X. entertains both elevens and officials."

In view of the fact that rewards such as these are given by various employers, a certain Co-operative Society may be pardoned its boast that its employees "have a football team," although it does "not give overcoats to goal-getters." 1

Factory resemble school Clubs,

though the idea of sport is novel to many workers.

It must not be supposed that such an arrangement times closely is typical of factory Clubs. Many are as worthy of the name of Sport as those associated with schools or colleges, and indeed are run on similar lines. Many factory Clubs, both struggling and successful, are the outcome of the strenuous efforts of those who themselves keenly appreciate sport, and are eager to bring its advantages to the workers. Especially does this latter apply to girls' Clubs, for to teach factory girls -not to play scientific games, nor to play well, but just—to play is often surprisingly difficult. Perhaps the spirit of childhood within them has been dwarfed. The necessity for earning daily bread has loomed so large on their horizon, and that of their parents, that all activities which are without recompense or reward seem to them poor and purposeless. The rough-and-ready plan of paying for skill in games doubtless supplies a motive for playing, but it kills

Wolverhampton, Co-operative Wheatsheaf, April 1914.

the spirit of sport. It is difficult to formulate the ways in which that spirit can be developed, but probably the most effective is personal influence, through presence in the playground and participation in the games. Most Social Secretaries adopt that method. Though it cannot be affirmed that those who actually play games are always the most successful secretaries, still ability to play smooths many of the difficulties in the path. In factories where there are several officers in the Welfare Department, the Sports Secretary is generally the most popular. He or she may at first have to contend with slackness and carelessness in matters of sport, but improvement in this respect is usually rapid and encouraging.

Recreative or Social Clubs frequently form part Workers of a general factory Institute, which has libraries, enjoy many literary societies, and even dining-rooms under its sport, out of supervision. We may here briefly indicate the forms doors of recreation which find favour in the sight of factory workers. Cricket (both for men and for girls), football, hockey, tennis, bowls, rounders, croquet, quoits, basket-ball, rowing, swimming, cycling, rambling and angling, all figure among the open-air sports of factory workers. In one case a small golf course attached to a factory is reserved for the use of employees, to whom clubs are lent upon application. In many cases all requisites are provided for use by members on Club grounds; this applies to Cooperative Clubs as well as others. Of the men's sections Bowling Clubs are among the most successful; they are usually associated with similar Clubs , in a League through which matches are arranged. Rambling Clubs are rather dependent upon the initiative of the Welfare Department, but some are very popular. As a rule, places of historic interest or beauty in the neighbourhood are made the objectives, but the expeditions have in some cases extended to

brief Continental tours. These Clubs, which are among the most difficult to originate, may become sources of permanent enjoyment to their members. A photographic section can well be associated with such a Club, and photography is a hobby which has

its devotees among factory employees.

Before the war gave Rifle Clubs and Cadet Corps associations which removed them from the realm of recreation, they were apparently very successful in many factories. Rifle practice was of daily occurrence in some cases, and miniature ranges have been set up on roofs. Military camps were looked upon in the light of pleasant holidays, and permission to attend them for a fortnight was considered a privilege. Sometimes ordinary wages, or half wages, in addition to the military pay, were granted to those employees who spent their vacation in military camps. Troops of Boy Scouts have been organised in the factories as well as troops of Girl Guides. The former seem much more popular than the latter, which have been disbanded in some cases. In one large factory, tents, with all manner of camping requisites, are provided free for those who will use them, but the demand is not great. Camping depends for its popularity largely upon an organiser. If a Social Secretary enjoys camping, he can make the boys enjoy it; but in many cases it has been tried and found too troublesome or too expensive. Occasionally an employees' camp is given up in favour of some such arrangement as that of the "Seaside Camps for London Working Boys," the firm contributing towards the boys expenses.

and indoors. Of indoor games, billiards is perhaps the most popular. Charges of about a penny an hour per person are customary for this, only grown men being allowed to use the best tables. Inferior tables are, however, frequently supplied for use by juniors. Chess and Draught Clubs are to be found more

rarely. Tournaments of many kinds are arranged among members of Recreation Clubs. Annual athletic sports are often upon a most elaborate scale, with numerous and valuable prizes. In some cases they are managed by the employees themselves, but almost invariably the heads of the business take a conspicuous part in connection with them. The wives of employees, besides being invited to such functions, are not infrequently permitted to join the Recreation Club, especially the sections devoted to social entertainment and the tennis sections. Their subscriptions are sometimes the same as those for women employed by the company, but there are cases in which a man pays little more for a "double ticket" than he would have to pay for his own.

Dancing is perhaps one of the most popular amusements. In one factory where dances are held fortnightly throughout the winter, the manager and his wife are present at every one. Special charges are usually made, and the proceeds divided between the working expenses of the Recreation Club and local charities.

The recreation grounds available for the use of employees vary greatly; they may consist of the roof of the factory or of acres of beautiful gardens and well-kept playing-fields. Even the provision of a flat roof in a crowded city is by no means to be despised; and the addition of a few pot plants makes a welcome break in the monotony of walls and pavements in a crowded city. An asphalted playground with swings and see-saws is not without its pleasures, but its hard contours do not suggest the relaxation which the workers need. Public playing-fields are frequently used by factory teams, and many factory Clubs hire grounds; still, a large number of factories have grounds of their own, some being very beautiful. To go straight out into the garden to play tennis appears as normal to these factory operatives as it would to a student, and in some cases at least there is as little supervision as in college grounds.

Sport develops discipline. To be able to dispense with supervision altogether is a veritable triumph, and it augurs well for the discipline of the factory and the quality of work done therein. The expense of watching workers at their work is an important item in the cost of production; some seek to eliminate it by making feat the taskmaster—fear of poverty, even fear of starvation. But fear saps the strength of the workers, and defeats the ends it was meant to promote. To eliminate the expense of watching by strengthening the characters of the workers, so that each can be implicitly trusted to perform the task undertaken, is the goal of those employers who provide untrammelled opportunities for the enjoyment of health-giving recreation.

## (c) Food

Where food is provided,

The question of the provision of food for factory workers is of special importance in the case of women and girls. Girls are notoriously careless about their meals, and, moreover, their wages are lower than men's and they can afford less for food. There may be something, too, in the fact that families tend to reside near the work of the main breadwinner, so their homes are more readily accessible to men than to girls. Possibly, moreover, men are more apt to suspect patronage. Employers sometimes hesitate to provide dining-rooms for men for reasons not directly connected with their works; for example, one employer stated that dining-rooms for his men would mean that those dependent upon them got worse food, as the only person in the family with whose food one must not tamper is the father.1 Nevertheless, there are many dining-rooms for men,

<sup>&</sup>lt;sup>1</sup>This is borne out by Mrs. Pember Reeves' experience. Vide Round about a Pound a Week.

FOOD 189

and in many cases one kitchen supplies meals for both men and women, generally in different rooms, often at different times. Prices are usually somewhat the chief higher for men, and the helpings larger, though some-times the only adjustment is made by the workers' cheapness selection from the menu. The food is, of course, purchased at wholesale rates by managers of the larger dining-rooms, and this can make a considerable difference in the cost of meals. However, the advantage is almost counterbalanced by the uncertainty as to numbers. Herein lies the chief difficulty: how to reconcile free choice on the part of the workers from day to day with certainty on the part of the manager as to what will be needed. The larger the number the more accurately can the demand be gauged; and experience brings with it a knowledge of daily seasonal fluctuations, so that by an efficient manager waste can be almost eliminated without with limiting the choice of dishes.

The winter months are generally those in which factory dining-rooms are most appreciated, presumably on account of the weather. But in each week there are fluctuations in the numbers. The opening while allowof a good fish-and-chips shop in the neighbourhood, ing for fluctuating for example, may decrease the numbers on Friday numbers. more than on other days. As a rule, however, Monday is the "small day," as many workers bring from their homes what was left from Sunday's dinner. The numbers generally tend to increase towards Thursday, but no hard-and-fast rule can be laid down.

In connection with a small dining-room established by ladies some twenty-six years ago in the neighbourhood of several factories the numbers varied from 70 to 200 on ordinary days, and from none to a hundred on Saturdays. To cope with such fluctuations is impossible, if hot joints are to be prepared and prices to be low. To gain some idea of the expenditure, we may look at the yearly expenses of this little diningroom (A)<sup>1</sup> and the quarterly balance-sheet<sup>2</sup> of a factory dining-room (B) where, on the average, about 110 dinners were purchased daily.

				(	A)					
Foo	d for	a year	r co	nst a	bout	t .			£357	
		d taxe				•	_	·	7I	
		and h		ina	•	•	•	•	69	
	zes .	and n	cut	6	•	•	•	•	120	
Ren		•		•	•	•	•	•		
		. n.d			•	•	•	•	13	
		and re	pa	115	•	•	•	•	19	
Lau	ndry			•	•	•	•	•	14	
									166-	
									£663	
				(	B) *	•				
77	·			,	,		7	come		
	xpens				,	f1-				
Flour, sugar,	etc.	•	• ;	€59	1				by em-	
Small groceri	ies	•	•	30			ers			£254
Butter and t		•	•	38	I				visitors,	
Butcher's me				38					d Com-	
Vegetables as	nd fru	ıit 💮		20		mitt	ee;	and	Works	
Fish, eggs, et	tc.			13		tea.				35
Cake				ΙĬ						
Milk .				21						
			_							
			1	230						
Portion of wa	ages t	naid b		-5-						
Institute	-Bon 1	P	,	48						
Depreciation	•	•	•	•					•	
Balance		•	•	4 7						
Datatice	•	•	•	/						
			7	289						£289
			t	209					r	£209

In the first case (A), no attempt was made to do more than cover the cost of food, as the dining-room was run on philanthropic lines. In the second (B), the balance-sheet (in greater detail) was submitted to a committee of employees which nominally controlled the dining-room. Rent, rates and taxes, lighting, fuel, laundry, and part of the wages were left to be paid by the employer. The dining-room cannot be considered one of the most efficiently managed, nor must the amateur nature of its management be attributed entirely to the committee of

<sup>&</sup>lt;sup>1</sup> 1913. 
<sup>2</sup> January to March 1914.

In a neighbouring county, another employees. factory dining-room (C), also nominally controlled by a committee of employees, was found to be charging only from one-half to one-quarter of the prices charged here (B) for dishes similar in quantity and quality.1 The fact that the former factory (C) caters for girls only cannot explain the discrepancy; for men receive larger portions and pay proportionately more (in B); but the fact that the employees' committee in the second case consists entirely of women may be of importance in this connection. The men may be more anxious to pay their own way; the women may be better marragers. As far as can be judged, The result the difference in cost appears to be largely due to largely depends upon management. Not that either is badly managed; managebut there is in one case a tendency to persist in old ment. methods even when they are proved unsatisfactory.2 An expert at the head of a catering department, or at least one who intends to become an expert, is essential to the successful provision of cheap, good, varying meals. This seems repeatedly overlooked. One finds, for example, a young typist, without an idea about the subject, flung into the position of manager of a huge dining-room. The marvel is not that things run in a haphazard way, but that they run at all. Where an expert has been given control of this department, the results seem to justify the A factory dining-room managed by one who had previously catered for the requirements of an

<sup>1</sup> Charges for Women and Girls—	(B)	(C)
Chop and mashed potatoes	6d.	
Roast beef, mashed potatoes, and vegetable	4d.	2đ.
Steak pie and potatoes	4d.	ı ɨd.
Liver, onions, and potatoes	3d.	ıď.
Tripe and onions	3d.	ıd.
Fish, parsley sauce, and potatoes	3d.	
Fish pie		ıd.
Shepherd's pie	2d.	₽ď.
Puddings	ıd.	₹d.

<sup>2</sup> The card given in Appendix IX suggests that the office expenses of the dining-room are needlessly heavy.

hotel covered all expenses except the manager's salary and the rent.<sup>1</sup> The meals provided were cheap and good, and the menus varied; <sup>2</sup> the numbers increased, and became more regular.

Ordinary factory menus The average factory menu would appear somewhat as follows:

Soup .			ıd.
Meat and tv		ables	3d.
Made-up dis	sh.	•	ī ₹d.
Pudding.		•	ıd.
Tea .			14

Soup is not generally taken, except when it is substituted for meat. Scotch broth proved very popular in one factory, where dinner frequently consisted of a penny bowl of broth and a penny pudding. In some factories soup is given gratis, the idea being to train the workers to appreciate it; but the success of the experiment is doubtful. "Nothing for a 3d. dinner is so popular as Roast Beef," was the report from one factory, where meat, potatoes, and vegetables were sold for 3d.; but it was added that the girls rarely spent more than 2d. each, so presumably it was among the men that beef was popular! Weekly tickets at 1s. 6d., providing six breakfasts and five dinners, are sold in one factory. The tickets must be purchased on Saturday for the next week; thus it is hoped to ensure the workers good food for the coming week. Incidentally it would decrease fluctuations in the catering; but the scheme does not appear to be very popular.

ought to be varied.

The importance of a varying menu can scarcely be realised by the many caterers who repeat the same

<sup>2</sup> Vide Appendix IX.

<sup>1.&</sup>quot; None of the firms visited have endeavoured to make the mess-room self-supporting; most are satisfied if the cost of the food is covered, but one or two make charges just high enough to cover the wages of the kitchen staff as well" (Miss Whitworth in Factory Inspector's Report, 1913). One firm, employing 6000 or 7000 workers, reports a loss of about £700 per annum on its dining-rooms.

FOOD 193

series week after week. The lively curiosity of the girls in one factory was raised by the manager who varied the menu seemingly ad infinitum. There is always some risk in introducing a new dish, but once the confidence of the diners has been won they assail new dishes with alacrity; and a distinct influence can be exercised over their choice of food.1 The caterer in one factory dining-room remarked that a fixed menu is a needless expense. She bought according to the market, not according to a preconceived plan, and no waste was permitted in her department.

A debit balance on the year's working, however, is not The balance a proof that the dining-room is economically unprofit-sheet is no able to the proprietors. The return expected is in success,

the greater efficiency of the workers.

The Chief Factory Inspector in his report for 1013 2 says, "It is gradually being recognised that the physical fitness of the worker has an important bearing on the output of the factory, and so it is found that dining-rooms and restaurants are slowly becoming more general, more especially in the modern and most up-to-date factories, and in those so situated that the workers cannot return home readily for their meals." He adds, "The experience of a Bristol firm is most instructive on this point. They have no less than five restaurants in one group of factories, each large enough to accommodate 1000 people, and the meals are provided by the employers at cost price or slightly below it. The first restaurant was started five years ago for one department only, and it was as indirect observed that a gradual reduction in the sickness rate economic in that department followed, until eventually it fell accrue to to one-half the amount experienced previously, when employers. the bulk of the workers had not the opportunity of obtaining a good midday meal. Similar results were

<sup>&</sup>lt;sup>1</sup> Menus actually used for a month in one factory are given in Appendix 1X. P. 8.

But charity ' where food is supplied apparently at a loss.

experienced when the restaurants were extended to other departments." The matter is simply stated, and it is regarded in this way by most employers, but there are other points of view. We may consider first that of the workers. There is a certain suggestion of workers fear "charity" about dinners supplied below cost, even though it be patent that the employers expect to reap financial benefit indirectly. This suggestion is displeasing to many workers, and if they considered that the food was supplied at a loss there would probably be more irritation than there is at present. The fact seems to be that the food does not cost less than the workers customarily pay, not does it look more in quantity; it is only the quality which is better, and that is less noticeable. If the finances of the diningrooms were entrusted to a committee of workers, it might be that in other cases besides the one cited 1 prices would be higher; but it is really not quite justifiable to entrust the finances to them without allowing them some voice in the management, and it is the undisputed control of the management which many of the employers want, even at the cost of several hundred pounds a year. By that means they hope to exercise a beneficial influence over the dictary of their employees; and for this they are willing to pay. is, in effect, paying more than the nominal wages, while securing a certain amount of control over their expenditure. The immediate effects on the employees are doubtless beneficial, as physical health and strength is the first object of the employers. But it should be carefully considered from the workers' point of view whether what is actually wages should not be recognised as such.

Truck Acts must be considered.

There are various methods of deducting from nominal wages for food supplied, and these sometimes involve employers in breaches of the Truck Acts. Deductions for victuals must not be made without

FOOD 195

the written consent of the worker, and must not exceed the true value of the goods supplied.1 The legal pitfalls are fewer in cases where the full wages are paid in coin, and workers buy from the factory diningroom what they desire; and this certainly saves much labour in book-keeping, and is the usual practice. To what extent food supplied gratis becomes part of especially wages in the eyes of the law does not yet appear where food is supplied Beer supplied to workers in laundries was considered gratis. part of wages; cocoa or ginger-beer subsequently substituted was still part of the wages; and, when it was no longer provided gratis, an addition had to be made to the money wages.2

Milk is frequently supplied gratis in factories to some of the workers, and tea is sometimes taken round to all the hands during the afternoon. In one case tea (hot or cold) is provided free, as the management thinks drinking cold water during hot weather is injurious to the health, and so forbids it. £300 per annum is spent by one firm on milk to be given to young employees, and in another case a late director's bequest supplies free tea with dinner. The legal aspect of such "gifts" from employers does not appear to be considered. Custom may convert them into "rights" on the part of employees.

In some smaller factories the catering is handed a direct over to an outsider; the dining-room becomes a rent-profit might be made by free restaurant, or even a subsidised restaurant. appears that a profit can be made out of selling food food, at low rates to factory workers, and the question arises as to whether employers wish to make their dining-rooms pay. Their real object is, as a rule, to but, as the induce the workers to eat good food, and the only way employers' object is to of doing so apparently is to put good food in places raise the easy of access, at the same price as that for which standard of inferior food can be obtained elsewhere. Most em-

It the sale of

<sup>&</sup>lt;sup>1</sup> I and 2 Will. IV. c. 37, s. 23. <sup>8</sup> Factory Inspector's Report for 1913, p. 105.

they prefer an apparent loss to a transfer of control to the workers.

But their co-operation

must be

secured.

ployers seem quite satisfied with the results, but these cannot be achieved by entrusting the dining-room to one neither interested in the employees nor under the supervision of those who are. To give the workers control of a dining-room may be to defeat the end for which it was established—namely, to raise the standard of their meals—yet upon their co-operation the success of the venture must needs depend. share in the management of the dining-room is sometimes given to the workers themselves through a committee, generally elected from the various departments. A monthly meeting may be held to discuss their likes and dislikes with regard to the menus, the methods of serving, costs and nutriment, and various details. Frequently very good suggestions are made by the workers, and they gain some knowledge of the difficulties which have to be overcome, and a touch of dignity through responsibility. one case, girls meet weekly and select menus for the coming week. In one or two cases they are allowed to take a turn in the kitchen for a month at a time, but this privilege is not greatly appreciated, and cannot be forced. Its success or failure depends upon the personalities concerned. In one factory, the manager said that girls about to be married seemed inclined to take advantage of the opportunity of learning how to prepare food. The fact that appliances in a factory are usually incomparably superior to those found in ordinary working-class homes detracts from the value of the experience gained.

even at the expense of considerable trouble.

The finances of the dining-room are rarely submitted to the workers, and perhaps never in their entirety. In one case, where all accounts pass through the ordinary clerks' hands, the caterer says she dare not purchase margarine or any stores which are not considered first-class, as complaints would arise instantly, even though there were no perceptible difference in the food provided. It is probably

FOOD 197

<sup>8</sup> Vide Appendix IX.

much more troublesome to permit the workers any share of control than to run the dining-room automatically; but in those cases in which the former method has been attempted the results seem to warrant the extra trouble involved.

It is no easy task to supply several hundred hot various dinners within a few minutes, and the dining-rooms arrangeneed to be well arranged. Especial difficulties arise made to in connection with payments which tend to cause expedite the service of delay. Most factory mess-rooms have special schemes, hot dinners, more or less efficient, to expedite the service. One of the most elaborate is as follows: places at table are assigned to all those who signify their desire to dine regularly, and an officer (one of the factory hands) is appointed to look after each group of about twenty. Typed menus for a week are placed on the tables.1 There are also cards on the table, one for each worker.2 On Thursday at dinner one marks one's card with an order for Friday's meals, on Friday one orders for Monday, and so on. If one thinks on Friday that he will want roast beef, vegetables, and Yorkshire pudding on Monday, he marks, opposite "Monday dinner," a cross in the "40" column and another in the "9" column (as those are the menu number of the desired dishes). The cards are collected, and clerks count up the orders, which are then sent to the catering department. The appointed girls, leaving work somewhat early, get the dinners ready for their groups, so that the others merely walk to their places and find there the food they ordered. Those who do not mind waiting, and who are willing to take the risk of not getting what they want, do not order the day before, but wait at a counter till their turn comes. The scheme is not very expeditious, and more labour is needed for book-keeping than with other systems. At the end of the week the totals are reckoned and deducted

1 Vide Appendix IX.

from wages. A stream of several hundred workers, all desiring to be served at the same instant, needs careful control, and probably the best arrangements are somewhat as described below.

A large separate building of some three floors is devoted entirely to the use of the factory workers, being used each day for meals, and occasionally for social entertainments, whist-drives, dances, etc. The kitchen is well fitted with appliances for preparing and cooking food on a large scale, and the dining-rooms themselves are provided with long counters, the greater part of which consists of "hotplate" for keeping the food hot after it has been portioned out in expectation of the advent of a large number of hungry and impatient workers. Before the counter, at intervals, are placed barriers, similar to those before ticket windows at railway stations, to guide applicants "in" and "out". For the rest, the rooms are fitted with tables and forms or chairs, the tables being composition slabs some 18 inches wide. on metal stands. Chairs are to be seen only at a few tables which are recognised as those of the overlookers. The heads of large departments have separate rooms, and somewhat apart from the rest are the rooms for the use of the managers or directors. About an hour before the expected rush the dinners are being cut and placed in the hot-plate. Then, with the sound of the whistle one hears the rush of and to avoid feet. Bills of fare are exhibited at the entrance. Each worker, on entering the building, buys from a clerk checks to the value of the food to be purchased, and only these checks are taken in payment in the dining-rooms. The workers pass to the counter, different parts of it being reserved for different types of food—one part, hot meat and vegetables; another, puddings; a third, beverages; a fourth, pastries; a fifth, fruit. No change is given; counters of the exact value of the dishes required must be given-

delay in payment. FOOD 199

and the workers quickly and quietly carry their food to their appointed places if they are habitual customers, or to the place set apart for occasional users of the dining-rooms if they come rarely. Friends will sometimes arrange to get each other supplies, the only limit being that one must not purchase more than can be at once carried away from the counter. In this way all the diners are quickly supplied with hot food, the clerks at the entrance have within a quarter of an hour totalled the receipts, and, at the counters, the separate receipts show the demand for the different dishes. Once this is in working order on a large scale, it can be run to within a very narrow margin without any previous ordering on the part of the workers, and the privilege of being able to come in and buy just what one feels one wants at the moment is by no means insignificant. In one case, workers are served at dinner-time in the order in which they arrive at work in the morning. necessity for such a plan arises solely from the inadequacy of the means provided for keeping the dinners hot; it is little more than an admission that some workers will get cold dinners.

For a thousand workers to be served at one counter in a few minutes and to carry their food to places scattered over a huge room might seem to involve a good deal of noise or confusion or inconvenience; but in practice it can be managed with perfect order, and apparently to the complete satisfaction of all concerned. The chief conditions are: an efficient serving staff, adequate means of keeping the dinners hot, and a good system of making payments. Many factories have arrangements of this nature, though no two are identical.

## (d) Baths and Gymnasia

Baths of various kinds are to be found in factories:

It has long been recognised that cleanliness is essential to health. The provision of baths in factories is no new idea, as they were certainly provided by an employer so long ago as 1820. Nor can the need for them be denied, even with regard to factories where the work is not especially dirty or dangerous, for workers still come from homes where bathing is a luxury not readily obtained. Baths in factories may be classified as: (1) those needed because of the nature of the work; (2) those needed because of the absence of baths in the workers' homes; and (3) swimming baths. Some work makes the workers so dirty that they must wash before they can go home. But makes them even in such cases the provision of baths has only slowly become customary. An inspector, writing in 1914, could say that in sugar refineries baths have come to be looked upon as necessities, but it appears that in at least some cases the employer did not think of these necessities until he saw his men bathing in which case in the water used for washing the sugar sacks. they may be certain cases the provision of baths is compulsory. For example, a regulation for lead-smelting reads as follows:

necessary,

sometimes the nature of

the work

compulsory;

"There shall be provided and maintained in a cleanly state and in good repair for the use of all persons employed in any lead process . . . sufficient and suitable bath accommodation (douche or other) with hot water laid on, unless the water supply provided . . . is so arranged that a warm douche for the face, neck, and arms can be taken." 1

Where nitro- and amido-derivations of benzene are concerned, the Chief Inspector may permit the use of public baths, and employees engaged in specified processes must "take a bath at least once a week,

<sup>&</sup>lt;sup>1</sup> No. 752, 1911, Regulation 12. Cf. (1) Pottery Regulations, No. 2, 1913, Part 1, 11 (d).

and [also] when the materials mentioned in the Schedules have been spilt on the clothing so as to wet the skin." 1 Persons may be exempted from this regulation by a "signed entry of the Surgeon in the Health Register."

It is not uncommon to hear the complaint that men will not use baths when provided; the reasons probably differ greatly, and are difficult to discover, being often personal. An inspector tells a tale of how he visited some bathrooms which the employer told him the men would not use; and then, turning to the employer, he said, "Well, would you?" But the fact that even excellent baths are not always used is illustrated by another firm's experience. shower-baths, six slipper-baths, and a hundred dressing and drying-rooms were erected, and lockers were provided in which working clothes might be left at night. The total cost was estimated at about £4000, and four years after their erection a director still complained that they were not used. It is possible that the explanation might be found in the general discontent prevailing in these works, but the experience has been similar in works otherwise satisfactory. However, this complaint is not general, and where good boths-or even fairly good baths-are provided, and the manner of their provision does not annoy the workers, they often avail themselves gladly of the advantages.

The second reason for the provision of baths is sometimes that the factory must have cleaner workers than the nature of the workers' neighbouring homes are capable of supplying. To homes the workers such an assumption might seem an insult; makes them desirable. and doubtless they have some ground for indignation at the thought that their own labour cannot purchase for them even the means of fitting them for it. a mistake to think that workers prefer homes without

<sup>1</sup> No. 1310, 1908. Cf. Electric Accumulator Regulations, 1903, Regulations 14 and 20,

bathrooms, or that baths are not used for bathing because they are covered by table-tops or serve as pantries. The bath may be filled with household provisions during the greater part of the week, for space is valuable in a small house; but occasionally it is emptied of its heterogeneous contents and devoted to the purpose for which it was designed. But even such pantry-baths, concealed under the table of the living-room, are not frequent, and not even all L.C.C. flats furnish the luxury of a bath. This may be a matter for national regret, but it is certainly not a matter for personal shame, among factory hands. But apart from all question of blame, the employer, more especially the food-preparing employer, has to face the fact that he wants clean workers. In many cases two or more ordinary little bathrooms are all that he deems necessary. Unless the factory be small, or the number of baths large, it is impossible to make bathing compulsory, and it is usually optional at first. For example, in one corset factory "four bathrooms were provided . . . and if any worker asked for a ticket during the day, she might have a bath, soap and clean towels being always furnished. A clerk regulated the supply of tickets and the use of the bathrooms . . . the baths were very much appreciated, and constantly in use." 1 One large firm charges its employees 2d. for a hot bath (including soap); but charges in this connection are not usual. In one factory every girl has a bath once a week in winter, twice a week in summer--always during working hours. The girls are not paid for bath time, but they are generally working in groups and the work does not stop. Bathing is not compulsory, but all seem to appreciate it; and the beneficial effect on the atmosphere of the workrooms is said to be marked. In a certain jam-making establishment the casual hands employed during the

<sup>&</sup>lt;sup>1</sup> Factory Report for 1910, p. 119.

seasonal rush were anxious that opportunities of bathing should be extended to them as well as to the regular hands. The baths were occupied by the latter from Monday to Friday, but it was suggested that on Saturday mornings the casual hands might be allowed to use them. It is not improbable that the latter are in greater need of such opportunities; and, since they actually handle the fruit more than the regular hands, the public are directly interested in their application for baths!

Thirdly, there are swimming-baths, which are Swimminggenerally appreciated by the workers. They are baths are sometimes often erected without much expense or inconvenience provided. to the proprietors; in one case, they are emergency tanks; in another, they occupy land over which it is hoped the factory will soon extend; and in another, they are roof tanks.1 Sometimes swimming-baths are erected by the proprietors of a factory at a little distance from it, and presented to the neighbourhood with certain reservations; sometimes employers merely make arrangements whereby their employees obtain special terms at baths already existing in the neighbourhood. Swimming-baths seem to be very popular, but they are used for recreation rather than for clear liness, and, as a rule, only by a section of the factory community.

Baths are sometimes adjuncts to a factory gym-Factory nasium, the pupils taking a bath immediately after are mostly their gymnastics. Some fine gymnasia are to be of recent found attached to factories. "This is not a gymnasium; it is Buckingham Palace!" was the remark of a carpenter who had been employed in erecting one factory gymnasium. Such gymnasia are mostly of recent date,2 and are a development of the "empty room used for drill," examples of which are still to be

<sup>1</sup> Vide Factory Report for 1913, p. 101.

<sup>&</sup>lt;sup>2</sup> Vide Appendix III (d) for mention of a factory gymnasium before 1845.

Gymnastic training is often given in work time and is generally enjoyed.

seen serving useful purposes in spite of their simplicity. Attached to each completely fitted gymnasium, there are generally one or two full-time expert instructors, and they are sometimes assisted by a pianist who plays for musical drill or dancing. Lessons, sometimes given in works time, are compulsory for at least some of the workers. Girls or boys under eighteen are generally the first to be formed into classes. compulsory physical training under an expert teacher is to be found in factories where as yet very meagre attempts have been made at equipping a gymnasium, and discipline and keenness seem to be largely independent of the building. The lessons are enjoyed; there is hardly an instance to the contrary. This is partly due to the physical pleasure in the movements, but probably also to the fact that enthusiastic experts are generally employed as teachers. A class of factory girls can be the bane of a teacher's existence, if finished grace is the chief object; but if the keen enjoyment, the devoted enthusiasm, and the improved physique of the pupils are sufficient reward, the gymnastic teacher of factory hands is likely to meet with all he desires. The discipline appears marvellous at times to an observer, perhaps not so much during the actual lesson, when perfect order seems normal, as in the assembling of the pupils. In one large factory, where the work is of a dirty and rather unpleasant character, girls from various departments are grouped together in each class, the work of the departments continuing with little disturbance, and girls being suitably classified for purposes of instruction. Nothing could excel the way in which those girls go to and from their lesson in a rather dingy empty room; and the fact that they are workers of a class not ranked high among the factory grades, makes their conduct The whole effect on their all the more striking. general conduct it is impossible to measure, but it must be beneficial. An hour twice a week is what

The effect on discipline may be great.

most compulsory schemes enforce; many of the voluntary (evening) classes have only an hour once a week. There are, of course, no fees for compulsory classes, and the fees for voluntary classes are often as low as 1s. per annum if there are fees at all. Costumes Arrangeand shoes are frequently provided gratis, but in many ments vary cases they can be purchased by the wearers at cost price, say, 5s. There are instances in which boys are required to drill throughout a longer period than girls (e.g., boys till 17 years of age, girls, 16), but, as a rule, gymnastic classes are provided first and foremost for the girls. To what extent this is due to the fact that men teachers demand higher salaries does not appear. It is possible that girls need instruction more than boys owing to the nature of their occupations and the greater facilities for exercise commonly available for boys.

In one city several firms have united to form a "Girls' Gymnastic Association" (1913). There are some 600 girls in the Association, a small fraction of the number employed by the firms. Classes are held in the evenings; they are not compulsory; even when the instruction is free, the cost of a costume often deters a girl from joining. Instructors are shared by some of the factories. Inter-factory competitions are held, and there is an annual display and prize-giving, with a high dignitary of the city to distribute the prizes. Doubtless there are excellent reasons why such an Association should be formed; it excites a spirit of emulation and sets up a standard not too difficult of attainment. But the amount of ostentation about it is perhaps out of proportion to the merit of the methods employed. It does not include the factories wherein the greatest attention is paid to the physique of the workers. In one factory, where gymnastics are compulsory, there are competitions between the various classes, which interest all the junior employees who take part in them; the emulation excited is as keen as could be desired. The gymnastic course extends over three years, and is in the charge of several competent teachers, whose sole duty it is to care for the physique of the workers in that establishment.

Dancing lessons, given by experts, are greatly enjoyed, Dancing of some sort, principally Morris Dancing, is frequently associated with gymnastic lessons, and is enjoyed heartily. Even before a professional teacher was engaged, one factory sent representatives several hundred miles to compete at the Shakespearean Festival (1910), and there was great delight when three prizes were gained. Girls and boys danced together, and the Social Secretary was astonished at the excellent behaviour of the boys, whom, on other occasions, she was inclined to consider rough.

and prove beneficial in many ways.

As a rule, instructing a dancing class is not entirely satisfactory when undertaken by an amateur. enjoyment is found in the classes, but the discipline is not very effective. Dancing classes afford a valuable opportunity of teaching thoroughness. pupils' enthusiasm generally carries them far, even in face of difficulties, and the systematic presentation of these difficulties keeps it aglow. further, an expert has an adequate knowledge of the artistic possibilities of dancing, and knows how to awaken the latent imaginations of pupils. spectacle of twenty or thirty factory girls, dancing to represent the joyous return of spring or the desolation of winter, may, to the casual observer, seem merely pathetic or ludicrous; but to one who can realise the joy of creation behind, it presents a triumph of art. The same joy can doubtless be achieved by other means, but few present the same opportunity, through enthusiasm, to overcome the necessary drudgery. factory girls who have been kept for many hours each day in strict confinement, performing actions which are little less mechanical than those of machines, freedom to move is in itself a joy; to be able to put

meaning into that movement is thrilling. It matters little, comparatively, whether others can read the meaning or not.

## (e) Housing

It is not proposed to enter at any length into the Model subject of housing employees. The question is a villages built by manuvery vexed one, and one or two of the best known facturers "model villages" built by large manufacturers often are unconnected have lain quite outside the scope of Welfare Work; with Welfare they have been built, not by employers for their Work. employees, but merely as experiments in connection with the general housing problem. Houses in such villages are frequently occupied by families with no connection with the experimenter, though he may chance to be a member of a firm with works in the neighbourhood. In the thoughts of the public the name of such a village is apt to be associated with the name of the firm, but in fact there is no essential association.1 There are only a few examples of villages established expressly for employees, and a detailed examination of them is not possible here. We must On account be content to regard them as a part of the general of the war, the housing question of the provision of housing for employees. of workers This question has presented itself with special in-has become sistence since the outbreak of war, for it has been urgent necessary to call together large numbers of workers problem. into spaces which afford no adequate accommodation. It has never been found easy to move numbers of workers, though some fairly successful attempts have been made by employers who desired to move out of a town into the country. If the localities are not widely separated, the workers readily adapt their

<sup>&</sup>lt;sup>1</sup> Bournville, for example, has no direct connection with the firm whose name is frequently associated with it. It was founded by an individual member of the firm in the neighbourhood of the factory; but only a very small percentage of the employees live there, and comparatively few of the inhabitants are employed at the factory. There is no preferential treatment.

it devolves upon the partment.

habits to meet the necessities of the case; but if the distance between old and new factories is great, To deal with a change of dwelling is necessary. The Welfare Department in a factory must deal with both these Welfare De- cases-must arrange for suitable means of transit or for suitable lodgings. Often, by an arrangement with companies, trams or trains will be run at convenient hours; sometimes, with but a slight alteration in the factory hours, services already in existence will suffice. For example, if trains convey workers to the factory only at ten past six or twenty to seven, half-past six is a very unsatisfactory time for beginning work. Adjustments to overcome such inconveniences are readily made. The problem is much more serious when nothing but the provision of dwelling-places will afford the necessary facilities. Provision of Provision of board and lodging for workers is not common, and a factory inspector has expressed the opinion that "industrial workers should not in any way be lodged by their employer." 1

board and lodging by employers is usually undesirable.

> On the other hand, another inspector expressed the opinion that a lodging-house attached to a country factory "might be a boon to delicate town workers, who could thus be able to enjoy a few months in fresh country air, and at the same time earn the needed wages." 2 She admits, however, that an experiment of this nature was not altogether satisfactory.

Some hostels provided for girl workers prove fairly satisfactory.

In one or two cases, hostels built for the accommodation of girl employees present a rather attractive appearance. A factory inspector writes of one in which, in 1913, full board and lodging cost only 5s. 6d. or 6s. 6d. a week. It had "recreation, rest, reading and dining rooms as well as dormitories, a large number of cubicles, dressing-rooms with

\* Factory Report for 1910, p. 111.

<sup>&</sup>lt;sup>1</sup> Factory Report for 1913, p. 75. This, of course, relates to normal times, not to time of national emergency.

apparatus for drying wet clothes, and a laundry."1 A" girls' home," which has gradually come to be associated with one factory, began some ten years ago, when lodgings were found for two girls. It has gradually developed, until now twenty-four girls can be accommodated in a convenient hostel amid pleasant surroundings. About eighty girls have been in residence for longer or shorter periods—the longest being nearly six years, the average well over fifteen months. Nearly a third of the girls who have left did so only at the time of their marriage, yet in at least half the cases some dissatisfaction, either on the girl's side or on that of the employer, was said to have been the reason for leaving; and now there appears to be a slight tendency for girls to leave after shorter periods. Some of the girls still in residence have, however, made the hostel their home for years together. Probably it is one of the most satisfactory of those connected with factories, and the explanation appears to be largely in the fact that it is of gradual development. It has grown with the growing needs of the girls, as they became known to the Welfare Secretary. It was not established in any demonstrative manner, and is simply the outcome of careful consideration of the workers' comfort on the part of a discerning woman.

But the provision of an excellent hostel is by no but the means a guarantee that it will meet the wishes of the restrictions associated employees. Liberty is worth considerable incon-with them venience, even discomfort; and inevitably there are are distanteful, rules attached to hostels which conflict with the desires of the girls. One firm relates that for accommodation in its projected hostel "there was not one single applicant out of over 600 girls employed, this being undoubtedly due to one of the rules making it imperative for the residents to be in by 9.30 p.m., unless they had special permission to be out later

<sup>&</sup>lt;sup>1</sup> Factory Report for 1913, p. 100.

from the matron." Another firm, which built a

"Bachelors' Hall" for the accommodation of 100 men, and provided four meals a day at a charge of 12s. 6d. per week, found there was but small demand for such accommodation.1 This was attributed to the fact that no alcohol was to be taken into the building, and that the men must be in by eleven o'clock, "clean and sober". On the other hand, this firm found that four-roomed cottages which they built for their married employees let readily. The rents were low, and there were no irritating restrictions. It would seem that, generally speaking, cottages meet with more sayour than hostels in the eyes of the workers; but here the danger of tyranny is quite as great, if less obvious. The Medical Officer of Hyde in 1842 pointed out that "families paid a high rent for their cottages when they were living under their masters"; 2 and this appears to. be true still in certain cases. It is difficult to determine what rent can be considered just, and there is no doubt that men who work at a factory are willing to pay more for cottages in its neighbourhood than for others more remote. Hence it is easy for an

though high rents are sometimes charged.

would pay.

Cottages are

preferred,

On the other hand, it is dangerous for the workers if an employer rents cottages to them below their market price, for in so doing he may, unobserved, establish an insidious form of Truck. The market price is a genuine protection to the worker, and, though he is not always conscious of the cause, he is uneasy when it is set on one side, at any rate in respect of what he regards as necessaries. As far as housing is concerned, then, it is likely to be most satisfactory if the employer, as such, is not the landlord. Nevertheless, the Welfare Department has definite duties

employer to charge his employees more than others

A Welfare Department's duties in regard to housing are manifold,

<sup>1</sup> Twenty-eight men were in residence.

<sup>&</sup>lt;sup>2</sup> Assistant Poor Law Commissioners, 1842, p. 83.

in regard to the provision of suitable accommodation for the employees. In all cases it is possible to record addresses of workers, the distance between each home and the factory, and the means of transit usually adopted. Further than this a Welfare Department can, by keeping reliable records of available accommodation, exercise a certain amount of influence on the class of lodging-house which their employees choose. But, except in extreme cases, it does not appear desirable that the employer should directly provide accommodation. A certain degree of supervision seems inevitable in such cases, and this is irksome to the most independent workers, while any lack of consideration of their feelings is bound to produce friction.

The workers' home influences are often felt to be and of great of such vital importance to an industry that the importance, employer feels justified in attempting to ascertain that they are comfortably and suitably housed, even if he does not himself provide the accommodation. The extent to which an inquiry into the home surroundings of workers may safely be prosecuted by a Welfare Department depends upon the spirit in though which it is conducted, upon the personality of the exceedingly difficult. officers, and especially upon their tact. In some cases the home of every girl engaged is immediately visited; in others, girls and men are visited only when they fall ill or meet with an accident. visits are often appreciated by the parents of the girls and by the employees themselves; but everything depends upon the individual officer to whom this duty is entrusted. In most cases it has proved to be practicable, the initial stages being the most difficult. The direct benefits derived from such visits are usually slight, except perhaps in the case of trained nurses; but the establishment of a channel of communication between home and factory has often far-reaching effects. Difficulties which seem

insuperable may be overcome through the mutual understanding which personal intercourse makes possible. Especially are friendly relations between the factory authorities and the parents of young workers deemed advisable. They afford opportunities of discussing the hopes and aims and possibilities of the young worker. Parents may be eager to help their children, but ignorant of the means available. A Welfare Secretary should be able and willing to give whatever information is desired, and in return will learn what may reasonably be expected from each young worker. An Englishman's house is his castle, and no one who is merely an official sent by an employer has the right to enter it. But if a Welfare Secretary can become a friend of the workers, he or she will be gladly welcomed by them, even in their homes. The provision of gardens forms a much easier

The provision of gardens is a simpler matter.

subject for experiment than does the provision of houses. No irritating restrictions are necessary, and the issues involved are not of vital moment, for gardens are of the nature of luxuries to factory workers. Land lying idle can readily be utilised in this way. In many cases, blocks purchased by a firm with a view to future expansion of the factory premises are, in the meantime, divided into allotments, of sizes varying from about one to thirty poles, and are let to employees at rentals more or less nominal. Such arrangements generally prove highly acceptable to the workmen. In 1848, Horner quoted 1 the example of an employer who "offered about 200 square yards of land, gratis, to as many as wished to have it." Twenty men accepted the offer, and the employer expressed himself as "amply repaid by seeing that it had been a great means of enjoyment to them and their families." In the following year, Robert Saunders pointed out a that more than half the allot-

and generally successful.

<sup>1</sup> xxii., 1849, p. 148.

<sup>&</sup>lt;sup>2</sup> xxiii., 1850, p. 223.

ments available for gardening in the neighbourhood of Keighley were held by factory employees. "Even at the apparently exorbitant rents 1 charged," he said, "land is sought after with an infatuation that is almost incredible." To-day a similar eagerness is to be noted, and there is little need to encourage gardening by the offer of prizes, though this is sometimes done. One firm, to encourage flower-growing among their employees, supplied them with pots of bulbs. The flowers were to be grown in the homes of the workers, and prizes were to be awarded in the spring. The first attempt was a complete failure, but it was intended to repeat the experiment. Annual exhibitions of flowers and vegetables are held in connection with some factory gardens, and the spirit of emulation possibly heightens the interest with which they are cultivated. The profit derived from these plots is not inconsiderable; in one case a man is said to have made f5 out of a plot for which he paid 5s. in rent.

In cities there is often no possibility of gardens, except, perhaps, on the roof; but factory gardens are becoming more and more common. There are pathetic little patches of gardens, reminiscent of East End window-boxes, and there are gardens many acres in extent. There are gardens for growing vegetables, gardens for recreation, and gardens to attract the notice of the public: their usefulness is manifold and has long been recognised. David Dale provided playing-fields for his workers so long ago as 1792, and the park in connection with the Saltaire mills (built in 1853) 2 is still used by the operatives, and witnesses to the excellent intentions of its founder. The striking characteristic of the best modern factory gardens (of which there are happily more examples than those known to the general public) is their homeliness.

<sup>1</sup> Average £7 per acre.

<sup>&</sup>lt;sup>2</sup> G. M. Doule, Harper's New Monthly Magazine, 1872.

They really seem to be regarded as the property of the workpeople.

The kind of garden depends very greatly upon the cost of land in the neighbourhood and the proprietor's hopes as to future extensions, but there is undoubtedly a tendency to consider it a desirable, if not a necessary, adjunct to a modern factory. Here employers are unconsciously anticipating possible legal regulations as to the proportion of land which may be covered by factory buildings, and it is interesting to note that such regulations are already made in connection with scientifically planned villages.

## 2. MENTAL DEVELOPMENT

The education of young workers is largely in the hands of employers.

The law is strangely silent, or at best coldly permissive, with regard to the education of persons over fourteen years of age in England. A boy or girl entering a factory is freed from the Local Education Authority and plunged into a whirl of industrial life, where the sole authority appears to be that of the employer, whose will becomes almost tantamount to law. Further education depends to a great extent upon the attitude which the employer assumes towards it. Many employers are merely indifferent to the matter, therein being on a par with the majority of the nation, whose lack of interest is shown by the lack of legislation. Trade Unions, as such, have not paid much attention to the question, and the efforts of working men in this direction must be treated entirely as the work of Co-operators. But in an increasing number of cases employers make attendance at classes obligatory upon all young employees.

What induces them to take such a step? Their motives are, undoubtedly, mixed, and are liable to

<sup>&</sup>lt;sup>1</sup> Vide A. Mansbridge, Continuation Schools of England, edited by M. E. Sadler, 1907, p. 373.

be called in question. Self-interest is always expected; we may consider how far this expectation is justified.

The employer's economic interest lies in his workmen as producers and in his customers as consumers. Thus it is his immediate interest to make In technical good producers of his employees, while their own education workers and interest, rightly understood, carries them farther employers The employer's interest in them as producers, how-have a direct ever, has practically forced upon him the provision-interest. directly or by subsidy—of technical education for,

at any rate, some of his young workers.1

Technical education as at present understood is really a product of the mneteenth century. It came into being with the decay of apprenticeship, the extension of the field of industry, and the straitening of the scope of individuals within that field. It became practically necessary for firms engaged in many forms of industry to give their most promising young employees special facilities for learning their trade; otherwise, the industry in general, and the firm in particular, would have been left without managers and foremen capable of co-ordinating the numerous specialised processes into which the trade had been divided. If we take an engineering workshop, for example,2 we find that an ever-increasing number of boys and labourers "progress" from one process to another with little direct instruction, until, by mere practice on a succession of machines, they become qualified turners or fitters. The up-todate employer, however, finds this process accompanied by the drawback that the majority of such workers, from lack of definite technical instruction, are incapable of any but the simplest routine work. He is therefore compelled, in his own interests, to

<sup>2</sup> Ibid., p. 472.

<sup>&</sup>lt;sup>1</sup> This is, generally speaking, true of the metal, building, and printing industries, the chief exceptions being the boilermakers, the Sheffield trades, and the stonemasons (vide S. and B. Webb, Industrial Democracy, 1902, chap. x.).

The term
"apprentice" is now
limited to
workers
selected for
special
training.

insist upon technical training for the youths he employs. He may enforce upon all some degree of education with a view to subsequent selection; or he may at once select the best of them and insist upon their being trained with a view to becoming fit to superintend a workshop. Although these boys, selected for special instruction, may be called by the old name of "apprentices," they are no longer the rank and file of those who enter the trade and hope to become skilled workmen, but those who may not unreasonably hope to acquire some share in the management of the works.

Technical education has been, more or less efficiently, provided for a handful of such apprentices in many industries. "The movement for encouraging the more scientific training of apprentices seems to have begun in the engineering trades. It has also become strong in several other branches of industry, especially in the building trades, textile trades, printing and lithography, leather industries, plumbing, cabinet - making, plastering, house - painting and decorating, and dressmaking." 1

But the fact that such instruction is at present provided only for a small section of the manual workers must not be forgotten. Even in dressmaking, for instance, few of the workers master the whole trade; nor does it appear to be to the immediate financial interest of anyone that they should do so.

In 1887, when asking leave to present a Technical Instruction Bill, Sir Wm. Hart Dyke alluded to "the vast voluntary efforts which had already been made with regard to technical instruction." "I may be asked," he said, "'If you once establish the principle of rating, do you not thereby lessen the amount of voluntary effort?' I believe that we shall do nothing of the kind. . . . I believe that those who

<sup>1</sup> Report of the Consultative Committee on Attendance at Continuation Schools, 1909 [Cd. 4757], p. 96.

Public subsidies to industrial education need not supplant voluntary efforts, are spending money voluntarily for this are doing it in a cause they know to be the best one in which they can spend their money, and where for all the money spent more than compound interest will be paid in the result." 1

To this day it will be found that technical instruction is given largely because "it pays," and that opinions vary about the profitableness of literary education. The national interest would doubtless and are in be best served by some more complete system of the public interest. education.

"It is worth noting that, in such a town [as Leeds], it is most probable that if the leakage between jobs could be stopped by a complete organisation of the market for boy labour, it would be possible to raise the school age by one year without appreciably affecting the amount of work done and the wages earned by the whole boy population up to the age of twenty years." 2 Even if this could not be done immediately, much might be accomplished by the establishment of training schools in connection with the Labour Exchanges, where all young persons who are unemployed must report for certain hours daily.3 More general education would probably prove of economic benefit to the nation, not so much because of the "one great industrial genius" whose value is "sufficient to cover the expenses of the education of the whole town," as because of the men of mediocre talent, who, without education, will fail to develop their powers. The man of genius may find out a way for himself; the ordinary man needs help.

Many of the workers themselves do not see beyond The econotheir primary interest as producers; and so they mic interest of workers

<sup>&</sup>lt;sup>1</sup> Hansard, July 19, 1887.

A. Greenward, Juvenile Labour Exchange and After Care,

Wide suggestions in Way to Industrial Peace, 1914, p. 170, etc. 4 A. Marshall, Principles of Economics, 6th edition, 1910, p. 217.

desire technical education, while scouting the idea of literary education. The Workers' Educational Association is doing its best to combat this tendency, and may perhaps be pardoned if it over-emphasises the importance of the other side of the question.

and employers in non-technis not obvious,

Financial recompense to the employer becomes problematic when educational advantages are extended cal education to the rank and file of the employees, or the instruction is of a non-technical character. The opinions of two large and experienced firms, the majority of whose employees are not highly skilled workers, may be given in this connection. The first informed the Consultative Committee on Attendance at Continuation Schools that, in their opinion, it was "economically advantageous to employers to encourage their younger employees to continue their education, except in the case of certain trades which make an unfair use of the human material employed by them." 1 The second firm "doubted whether the firm itself obtained any purely financial advantage from parts of their educational scheme, though they thought that, 'If similar methods were employed continuously and universally, the physique and intelligence of the working classes would improve, and employers would thus obtain better labour." 2 It is worthy of note that the latter statement is made by the firm which carries on probably the most extensive educational work undertaken by any English employers at the present time.

The Consultative Committee, however, after careful consideration of the matter, gave their conclusion in the following words: "It is probably safe to say that a large number of employers are in no way. hostile to education, but simply indifferent to it. Its practical results upon their own business have not been brought home to them. It is all to the good, therefore, that those great firms which have

<sup>&</sup>lt;sup>1</sup> [Cd. 4757], 1909, p. 129.

<sup>&</sup>lt;sup>2</sup> Ibid., p. 130.

become pioneers in the education of their workpeople have defended their policy purely on business grounds. That many of them have been influenced largely by philanthropic motives as well is, of course, well known. But they have been consistent in claiming that their methods are those of sound industrial finance, and it would be idle to ignore that in an industrial community this is the argument that will have the greatest missionary success. It must be remarked, too, that it is not only in the highly skilled trades that the education of the workers has been found to increase and improve the quality of the output, nor is it only technical education that has been demanded. It has been found by experience that even in factories where the work is comparatively unskilled and monotonous, the continued education of the employees has had a marked effect upon the work The manual dexterity of the workers may but nevernot be touched. But they become steadier and theless it is real. more self-reliant; their self-respect increases; their physique improves by better ordered lives; their pride in their work is increased. The result is twofold: the employer profits by diminished waste and improved work; the worker profits by his ability to earn larger wages, by the knowledge of how to spend them better, and by increased happiness and health." 1

This brings us to a consideration of the individual The value of worker's attitude towards continued education. Self-education interest may be expected here no less than in the case of the employer, but it may not be of the same type. Upon his education depends not only the worker's power to earn money, but his power to spend it—his power as a consumer, not less than his power as a producer. But in boys or girls just released from is often school and plunged into industrial life, the desires of underthe moment prevail over visions of future prosperity; by young and they are apt to turn away from continuation workers,

¹ [Cd. 4757], 1909, pp. 121-2.

classes without a thought as to their influence on after years. No doubt those who are above the average 1 will attend evening classes for technical instruction, and the keenest of them will not be denied the knowledge which alone can make plain the path of progress. Of the stumbling-blocks in their way they make stepping-stones. But it is the young workers of a "rather tame and uninteresting type," 2 without vice as without ambition, who most readily allow themselves to be drafted into continuation classes whose purpose they cannot discern. The average factory worker at fourteen years of age, already forced to work hard for some nine hours per day, can scarcely be expected to desire lessons in literature or arithmetic.

and is seldom obvious.

Speaking generally, then, it may be said that economic reasons account for the fact that employers insist upon, and even provide, technical education, and that workers attend such classes; but that for both the provision and the appreciation of purely cultural classes the reason must be sought elsewhere. In the extension of educational advantages to the rank and file of their employees, and in providing nontechnical education, employers pass beyond what can be considered immediately and directly profitable. It is to such education that the firm quoted above 3 referred. There is probably no purely financial recompense, but from time to time an employer, looking upon his workers, has seen, beyond factory buildings and factory hours, men and women living lives empty of interest as he understands interest, devoid of pleasure as he knows pleasure, and he has willed it otherwise. Truly, his wisdom may be at fault when he attempts to give to others what he

3 P. 218, vide [Cd. 4757], 1909, p. 130.

<sup>&</sup>lt;sup>1</sup> Vide W. Beckit Burnie and A. O. Jennings, Paper read at the Summer Meeting of the Association of Technical Institutes, July 1014, D. 5.

July 1914, p. 5.

\* Albert Mansbridge, Continuation Schools of England, edited by M. E. Sadler, 1907, p. 383.

himself would value; but certainly he is actuated by

neither pride nor profit.

It is not intended to suggest that the dividing Hence arise line is clear, but merely that the extremes are remote, the diffiand that the efforts of employers to provide instruction enforcing for their workers, though mainly dealing with the general economically profitable, extend over a considerable range. Any attempt on the part of an employer to transcend the limits of the obviously profitable is liable to further question. It presents once again the distasteful possibilities of a patronising philanthropy, and, moreover, is apt to be interpreted as an attempt to gain an intellectual, as well as an economic, hold upon the workers. As has been pointed out elsewhere, it is frequently felt that an employer trespasses upon the rights of the workers when he touches anything not directly profit-producing.

We may now pass to a consideration of the in- The law fluence which employers can exercise ever the educa-scarcely limits the tion of their employees. The English law at present employer's permits them such control over the time of young influence over workers that comparatively few of the latter, even for education, the sake of future advancement, willingly add to the labour of the day, and many are physically unable to do so., Factory workers are, perhaps, better off in this way than domestic servants and others whose labour is without any legal restriction and often without definite limits, but even the Factory Acts are based upon the assumption that young persons of 14 to 18 are primarily workers, not potential workers in process of development. At 14 an abrupt division is made in the life of a boy or girl who goes to work in a factory. From being a pupil, studying various more or less interesting subjects, under careful supervision, for some thirty hours per week, he or she normally becomes a full-time wage-earner, working up to sixty hours per week at some more or less monotonous task. The foundations carefully laid during childhood are

but might and with advantage make him definitely responsible.

rudely shaken, and only exceptional young people find that those foundations remain firm enough to serve for future building. If he will, an employer can do more than insist that certain hours shall be spent in study each week; he can arrange the hours and dictate how and where they shall be spent. That he has such power may be resented, but it cannot be denied. It would be well if there could be an extension of the principle of the Scottish Act, which, recognising his

1 "By far the most effective weapon at the service of the employer is to make regular attendance at Continuation School an absolute condition of employment. This appears, at first sight, a strong step to take, and where tried in actual practice it has been found in some cases to give rise temporarily to some slight ill-feeling. In one large firm, a few of the young employees tried at first to make trouble at the classes, but an intimation from the head of the firm that the order was going to be strictly enforced soon had its effect, and it is now stated that it is popular both with pupils and parents. There are other firms where the same policy has been adopted, and in most cases, so far as the Committee are aware, it has been successful. It is clear, however, that so long as the adoption of such a policy is voluntary, it must have one obvious limitation, namely, that young persons who do not like the conditions will seek elsewhere for employment. In places, therefore, where there are many competing firms, the policy would probably be unworkable, as any individual firm which adopted it might experience considerable difficulty, anyhow at first, in securing

a sufficient number of good workers" ([Cd. 4757], 1900, p. 123).

\*Vide 8 Edw. vii. c. 63, s. 10 (1) and (3). In Scotland, since 1909, it has been the duty of a school board "to make suitable provision of continuation classes for the further instruction of young persons above the age of fourteen years with reference to the crafts and industrics practised in the district (including agriculture if so practised and the domestic arts) or to such other crafts and industries as the school board, with the consent of the Department, may select, and also for their instruction in the English language and literature, and in Gaelic-speaking districts, if the school board so resolve, in the Gaelic language and literature . . . also . . . to make provision for their instruction in the laws of health and to afford opportunity for suitable physical training." And it is "lawful for a school board" (in Scotland) "to make, vary, and revoke bye-laws for requiring the attendance at continuation classes until such age not exceeding seventeen years as may be specified in the bye-laws, of young persons above the age of fourteen years within their district who are not otherwise receiving a suitable education, or are not specially exempted by the school board from the operation of the bye-laws; and that at such times

authority in this matter, makes him responsible, where the Act is adopted, for the continued education of young factory hands.

His influence may extend beyond his immediate employees. For example, in one instance, a large firm, by threatening to withdraw its pupils from the local school, was able to enforce its desires as to hours and curriculum.1

We have seen 2 that, through his selection of workers according to their educational attainments, an employer often exercises a distinct influence over the school-leaving standard of a district. As matters stand at present a further control is exercised by the employer who grants leave from work for the purpose of study. He demands a voice in deciding the subject of that study, and he is scarcely to be blamed if, being possessed of dictatorial powers, he unconsciously brings them to bear upon the matter; to leave to chance the expenditure of the time he has voluntarily granted is more than can be expected of him.

To limit the power of the employer in this con-Thelaw nection, it has been suggested 3 that the law should might limit working enforce hours of leisure for young persons, so that con-hours for tinued education would become reasonably possible young for normal individuals in "their own time".

and for such periods as may in such bye-laws be specified. Such bye-laws may also require all persons within the district having in regular employment any young person to whom such bye-laws apply to notify the same to the board at times specified in the bye-laws, with particulars as to the hours during which the young person is employed by them" (8 Edw. vII. c. 63, s. 10).

A special case of the influence of an employer over local schools may be noted. The employer gives prizes at the rate of 10s. per three months to the boy or girl above six years of age who is first in any class, provided he or she is the son, daughter, brother, or sister of any of his workpeople. He also gives prizes for conduct and attendance. All prizes are to be selected and presented by the head teacher of the school. "Any of these girls or boys will receive special consideration and encouragement if they should, when old enough, wish to work at the factory." Is the employer endeavouring to establish a lien on the labour market?

2 P. 83. 3 Burnie and Jennings, op. cit., p. 11. as the early Factory Acts limited those of children.

But while elementary education became dissociated from factories,

schools may remain in close connection with them.

There are good reasons for such a course:

the difficulties are not insurmountable.

The employer's control over young people of 14 to 18 years now is directly comparable with his control over young children in the early nineteenth century; and just as universal compulsory primary education was associated with the Factory Acts, so may technical and continued education be associated with future factory legislation. Moreover, as the early factory schools of individual philanthropic employers served as evidence of the possibility and advantages of education for factory workers, so the factory schools of to-day, whether technical or continuation schools, pave the way for legislation. One great difference may possibly be that, whereas the primary schools were originally more or less intimately associated with the factories, and in course of time became completely separated from them,—passing from the domain of the factory inspector to that of a special Education Department,—technical and concontinuation tinuation schools may conceivably become more closely connected with factories in the future than they have been in the past. The chief difference is that, up to the school-leaving age, children were removed entirely from the factory, whereas the young workers must necessarily remain associated with it. The new schools must needs serve as a link between school and work, and the closer the bond the more definite will be the continuity.

The fact that so many difficulties arose in connection with the combined education and employment of children between 9 and 13 years of age in the thirties and forties of last century does not imply that it will be equally difficult to-day to provide for the combined education and employment of young persons between 14 and 19. One great problem in 1833 was how to ascertain the children's age. That now presents no great difficulty, as the child is kept in sight from the time he is 5 years of age. Again, a boy or girl of 14 can, to some extent, be held responsible, whereas the weary child of 9 or 10 could hardly be blamed if he dodged school. Moreover, the former is already under the supervision of a public department (in the school) and would merely be transferred to another branch of that department; he would not have to be "discovered" by a factory inspector. Further, it is highly improbable that any law enforcing continued education would apply exclusively to factories, and leave loopholes in all directions for the escape of pupils. Indeed, when we realise how many of the difficulties of 1833 exist no longer, we marvel at the temerity of the Legislature which then attempted to enforce education upon factory children, and become optimistic about future progress.

It is too early to predict with certainty along what lines compulsory education will be extended. Existing factory schools for workers of from 14 to 19 years provide examples which are worth considering. There are special difficulties in the case of small factories. Moreover, as was mentioned above, young factory workers form only a portion of the boys and girls to whom such educational facilities would be extended. The trade schools of Germany (notably those of Munich) simplify the problems involved; 1 but English legislation tends to build upon complicated customs, and the schools extant in factories seem to be worth encouraging. The type may survive by the side of more general continuation schools unconnected with particular works.

One of the chief advantages of a special factory and its adschool is that it greatly facilitates the arrangements numerous. between schoolmaster and foreman. At present, foremen, justified by common practice, and to a great extent supported by the law,2 regard the normal

<sup>1</sup> Vide Georg Kerschensteiner. The School and the Nation, translated by C. K. Ogden, 1914.

"The [Factory] Acts are based on a common misapprehension-that Juvenile Labour is the basis of National In-

working hours of young persons as practically coextensive with those of the adult, and somewhat resent encroachments upon their time. Adjustments, however, can be made, and are most readily made when the wishes of the foremen or departmental managers are consulted. A factory schoolmaster, writing in June 1913, said: "Every innovation meets with prejudice, and the schoolmaster who comes into a factory has to beat this down or qualify for a martyr's halo. But prejudice is synonymous with ignorance, and our policy is to invite managers to visit our classes, and especially to note the work of the lads in their departmen\*. This is a great incentive to boys to do good work."

In the case of technical schools, an up-to-date factory presents special facilities; the essential unity of purpose pervading it becomes manifest; the workroom demonstrates the utility of the laboratory and the laboratory reveals the wonder of the work-"What is the use of it?" is the cry of the youth tied down to study. "Where is beauty?" is the unvoiced question of the child of toil. Everything which brings into closer co-ordination these two elements, use and beauty, in the realm of industry, increases the value and intensifies the interest of life. Doubtless abstract, academic knowledge is indispensable for the higher branches of technical education, but for the average worker the consummation devoutly to be wished is that he should find romance in the trivial task of every day, and see in its proper context that which in isolation appears meaningless and vain. It is just possible that bringing classes actually into workrooms, as is done now in one or two factories, may prove too valuable a method

dustry—and we hope that the time will come when Bills will be drafted on the assumption that National Industry is based on Adult Labour, and that Juvenile Labour must only be used where it is compatible with the preparation of the young person to be an efficient adult worker" (Burnie and Jennings, op. cit., p. 10).

to be entirely abandoned when a wider scheme of education comes into being: In any case, the special factory school is worthy of the attention of the public.

It is not unusual to find that employers subsidise continuation schools in the neighbourhood, or pay the fees of their own workers at various local institutions; but in only a few cases are special schools attached to factories. Probably a gymnasium is the

type of classroom most frequently found.

There are obvious disadvantages in a school Several obwhich admits pupils from one factory only: (1) The jections may be urged workers do not mix with those from other factories against and other grades of society, and thus they miss much factory of the widened social intercourse which should be one of the greatest benefits of an educational institution; (2) the personality of the employer may, more or less unconsciously, dominate the school, and thus strengthen his hold upon the workers and weaken their initiative; (3) the comparatively small numbers make the expense proportionately great, so that it may not be possible to engage very good teachers. Let us examine each of these difficulties. (I) With (I) opporregard to the first, in practice, where schools are tunities for social interestablished in connection with a single factory, the course are bulk of the instruction is commonly given in works restricted, time, which leaves the rest of the day free for social intercourse. Moreover, in a large factory such as would be likely to maintain its own school, the opportunities of social intercourse are not narrowly restricted; and from whatever limitation of interests a factory school may suffer on account of its exclusiveness, the balance may turn in its favour when, in but this can connection with the school, there is a good social be remedied; club. In one case a club is open nightly for boys who attend night-school on one evening a week. Facilities of this kind are necessary if a school is to fulfil its possibilities. The social aspect of an educational establishment is always important, and, as Mr.

(2) the employer's influence may be excessive.

but this danger is not confined to factory schools;

(3) the comparatively small numbers may make the expense greater, but that need not affect the choice of teachers.

Mansbridge of the Workers' Educational Association says, "Evening schools should be, as far as possible, the instrument of a social institution for which the boy or girl has already a liking or respect." 1 (2) At present, the employer is usually careful to refrain from interfering more than is necessary with the school routine and curriculum, leaving such matters to professional teachers whom he employs for the purpose; and in any compulsory extension of the system the school would, presumably, be under the Education Authority, so that the will of the employer would not be unrestrained. The danger is a real one, and must be carefully guarded against; but merely removing the school from the factory will not avoid it.2 (3) The salaries of teachers are not commonly so large as to weigh seriously with an employer contemplating an extensive school system,3 and the expenses of the factory schools can be adjusted with reference to public authorities just as easily as those of other schools. At present they commonly receive grants, and in such cases are under the supervision of the Education Authority. For a grouped course of study suitable to young factory workers (other than apprentices) a grant of about 32s. per pupil per annum can be obtained (in England). Something like two-thirds of the teachers' salaries may in this way be recovered, but no definite general statement can be made in this respect, as the rates are determined by the Board of Education in each case, and occasionally differences

¹ Continuation Schools in England, 1907, edited by M. E. Sadler, chap. xi. Mr. Mansbridge further says: "Evening schools should always have at least one room where workmen and boys can, without hindrance, work independently of the teacher, do home-work in fact. Many homes in which respectable artisans live—not over-crowded—are inconvenient for the purpose."

<sup>&</sup>lt;sup>2</sup> Vide p. 223.

About £150 per annum is said to be the salary asked by a qualified school-teacher, who has also specialised in gymnastics."

of opinion arise as to the desirability of any particular

subject or group of subjects.1

We have seen that, in the present state of the The Welfare English law, the time which can be devoted to educa- Department advises on tion is largely a matter of voluntary concession on the matters of part of the employer,2 and therefore he is the only education. person who can make continued education compulsory. To spend six hours per week in a classroom can be made, and sometimes is made, a condition of employment. Such a step on the part of employers un-

<sup>1</sup> Regulations for Technical Schools, etc.

[Cd. 5329], 1910. [Cd. 6925], **1**913.

Course:

Minimum, 20 hours. Minimum hours per student, 14. Minimum age for students, 12 years.

Grouped course:

Minimum, 4 hours per week. Minimum, 80 hours in all.

Students' minimum average, 60 hours in all.

As a rule not more than 160 hours per annum per pupil receive grant for: (1) preparatory (elementary) work; (2) literary and commercial; (3) art; (4) manual instruction in wood, metal, or other materials; (5) science; (6) home occupations and industries.

Physical training, 60 hours. This regulation is relaxed for a grouped course.

Rates—" determined by the Board":

Preparatory, 2s. 6d. to 3s. 6d., as a rule.

Singing, 1s. 6d. to 2s. 6d.

Literary and commercial, 2s. 6d. to 3s. 6d. up to 5s.; and up to 8s. 6d. Honours Degree.

Art, 2s. 6d. to 3s. 6d. up to 15s. 9d.

Manual, 2s. 6d. to 3s. 6d. up to 5s.

Science (including mathematics), 2s. 6d. to 38. 6d. up to 158.

Home occupations and industries, 2s. 6d. to

3s. 6d. up to 5s. 6d. Physical training, 1s. 6d., or less, if more than

20. 2 "So far as I can judge . . . the idea of enforcing attendance at evening continuation classes without also limiting the hours of employment of all young people up to 17 years of age is regarded with less favour than was the case two or three years ago" (Albert Mansbridge, chap. xi., Sadler's Continuation Schools in England, 1907).

doubtedly opens up a way for legislative extension of compulsory education, and it is high time that the matter received public attention. Meanwhile the individual employer must walk warily, lest he unconsciously become a tyrant. It is the especial duty of the Welfare Department to safeguard him by voicing, as far as may be, the inarticulate desires of the young workers, and by obtaining the advice of experts on education.

Some concessions as to hours are necessary.

It is not merely that if the conditions of employment become too irksome the young people will look for work elsewhere. That is an extreme case; but anything which annoys them detracts from their efficiency as workers as well as from their happiness as individuals. Moreover, instruction which is forced upon pupils is hardly education in the true sense. To compel a boy or girl to devote certain hours to study is rarely advisable without some concession as to hours of employment, although compulsion of this sort is by no means unknown. In many cases shorter work-hours are permitted in consideration of the time spent in study; in one factory, which works only an eight-hour day, about five thousand hours per week are allowed for classes. Apprentices often have time off, but the ordinary workers much less frequently. Classes held in the day-time are judged to be most beneficial, but, apart from technical and gymnastic classes, they are comparatively few in number. When such classes are arranged, day-wages are not reduced, and piece-workers are said to make up for lost time. It is considered "very doubtful whether it is really worth while encouraging juvenile students . . . to attend shorter courses" than those which range from 80 to 120 hours per annum. This would mean, in practice, at least two hours per week. Such a moderate concession might readily be made to all young workers.

In the case of apprentices, educational facilities

Report of the Board of Education, 1913, p. 90.

are usually more readily granted. A day or more per week may be allowed for attendance at classes. some cases "the 'sandwich' system is adopted, the winter months being spent by the apprentices at the Technical School and the summer months at the works. In other cases, a definite period (one term to two years) is allowed off the period of apprenticeship in consideration of attendance at college courses."1

It must be a matter for careful consideration in Individual every factory, perhaps in each individual case, whether cases receive the hours and the fatigue of work are such as to from the permit of further tasks, and herein lies another duty Welfare Secretary. of the Welfare Secretary, whether the school be conducted on the premises or elsewhere, in works hours or at night. Employers sometimes make it a condition of employment that workers shall not, without permission, undertake any other regular duties; and there is reason behind such a condition. The willing worker will overwork as readily as the shirker will avoid his fair share. To study the individual and, as far as may be, to adjust circumstances to his peculiar needs are the duties of a Welfare Secretary.

It may be of interest to glance at the arrangements The example of what may be considered the best factory school of an existexisting in England at the present time. There are school shows two sections, boys and girls, being taught separately. There is a principal for each section, and a staff of sixteen trained teachers devotes its whole time to the school. The classes are so arranged that between 12 and 20 pupils are in each. The principals arrange the classes, consulting with the Welfare Secretaries and the heads of the departments in which their pupils are engaged, and when once the idea of work-hour classes has become familiar, there is little difficulty in making the necessary arrangements. Each girl in her first year has to make a blouse and a skirt, and appear in them before the principal for her criticism;

→ [Cd. 4757], 1909, p. 123.

in her second year she learns cooking; and in her third year, housewifery in its various branches. Lessons missed have to be made up-indeed, the courses are specially extended for any who have failed in proficiency or in attendance. Girls spend half an hour per week in the gymnasium; the boys spend four times as long-a somewhat unusual arrangement, for factory gymnasia are generally provided more specifically for girl-workers. The boys learn woodwork in their first year, and elementary science subsequently. English and mathematics are taken for an hour each per week throughout the three years. addition to the classes held during works hours, the boys are expected to attend from 5.20 till 7.20 p.m. on one evening a week. It was found that the "effective value" of these classes was much less than that of day classes, and no mathematics are now attempted in the evenings. It is reported that the boys sometimes fall asleep over their books at night!

that the necessary arrangements as to hours can be made.

We may notice in somewhat greater detail the arrangements made for the boys' section of the school. There are about 350 boys, arranged in 18 classes. These are drawn from various departments, and the principal says: "The great problem is to satisfy the teacher who aims at homogeneity, and the departnental manager who wants to send lads to class on lays and at hours that suit his own work. Obviously, he larger the number of your classes the more easy t is to make individual changes required by the lepartments. Moreover, with only 20 boys in a class, here is opportunity for individual teaching in cases where a lad is below the average ability of the class. My experience is, however, that heads of departnents magnify their difficulties,—they think we' nagnify ours,—and that if you gain their interest and goodwill they will accept whatever arrangements ou make. . . . As regards dislocation of factory organisation, there need be little. The teacher must

realise that the factory comes first. It would be foolish for a teacher to draw up his time-table and his classes, and expect to impose it on the factory without consultation of departmental managers. In our own case the classes work quite automatically, and with the regularity of tides for three months at a stretch. Foremen know exactly what boys will be absent each day and at what times, and they arrange the work accordingly." As there are classes held every evening, and as a master is always in attendance at the boys' club room, the principal finds it difficult to allow his assistants sufficient free time in the evenings for association with their personal friends, who are normally occupied during the day and at liberty in the evening. It is not well, even from the point of view of the pupils, that teachers should be isolated men; and their own feelings on the subject are often strong. Classes in this factory school are held from 7.30 a.m. till 7.20 p.m., and each master has classes from 5.20 till 7.20 on four evenings a week, while on one evening he is on duty at the club from 7 p.m. till 9 p.m. The masters' hours are necessarily somewhat irregular. It may here be pointed out that if the school hours are ten per day and individual masters work but six hours per day, a staff of five masters means a "teaching strength" of only three at a time on the average. Classes of from 12 to 20 pupils are considered as large as is compatible with the amount of individual instruction generally required. If, then, a teacher is expected actually to teach for thirty hours per week, one teacher is needed for every 60 to 100 pupils if they are to have six hours' instruction per week. This proportion is the same whether all the classes are held in works hours or Of course, the same classrooms, if sufficiently ventilated, can be used for classes all day long—one gymnasium, for instance, is in use practically without a break throughout the working hours of the

factory, three instructors sharing in the work of teaching.

The additional strain of education on young persons must be considered

Six hours each week for four years, namely, from 14 to 18 years of age, are regarded by those in authority here as the minimum time in which a normal youth can so strengthen the foundations of his education that they may serve for future intellectual develop-But this minimum is rarely attained even where employers insist on attendance at continuation It really is more than can be fairly expected of a boy or girl who works the same hours as adults. The adult workers, once their day's work is done, may go where they will; is it fair to expect the youth to work as long as the man and then go to school? the case of girls the strain is even greater, for many of them have to take their part in the work of the home before and after factory hours. It is no wonder that women factory inspectors look apprehensively upon compulsory education for factory girls without any concession as to hours. Compulsion is undoubtedly needed, but not only for the workers; the employer must allow his young workers time for classes, and boys and girls must spend their time in the appointed way.

before classes are made compulsory.

It must not be supposed that young people are always unwilling to attend classes, or even indifferent to them. It is possible to make classes very attractive, but a basis of compulsion is necessary if continued education is to become universal. Probably some workers would be physically unfit to attend classes in addition to working, even for shorter hours; and such cases would need to be treated individually. Individuality must be allowed some expression too in the choice of subjects, but it will be found that the secret of the attraction of classes does not lie wholly in the subject. The personality of the teacher counts for much, and among factory teachers are to be found men and women of initiative and zeal whose devotion is

No effort should be spared to make education attractive. repaid by the enthusiasm of their pupils. But here again a difficulty presents itself. In many evening schools the teachers are distinctly overworked and unable to do themselves justice.

The importance of having good teachers can scarcely be over-emphasised. Frequently the salaries offered are too low to attract the type of men and women calculated to inspire their pupils; and with inferior teachers the continuation classes may be worse than useless. Though this danger is slight at present under a voluntary system, it must not be forgotten in the contemplation of any compulsory measures.

Let us pass now to the question of curricula. Curricula What branches of study should be encouraged, and by what means? The desires of the young workers must not be overlooked. Certainly girls and boys can be treated very much more autocratically than their elders, but the wisdom of such treatment is doubtful, and there are certain undefined limits which must not be overstepped. Granted that boys and girls may reasonably be expected to attend classes, granted even that the employer can dictate conditions of employment, still the choice of subjects remains of great importance.

Considerable freedom of choice is permitted to the workers by some employers, who undertake to pay the fees at schools in the vicinity of the factory for almost any subject, provided that sufficient attendances are made. But in the case of a factory school, whether held in the day or in the evening, the choice are limited is limited by the school curriculum; and, generally, by circumfactory workers, by the mere fact that they work in factories, are prevented from joining certain classes. Let it be granted that six hours per week are to be and the devoted to educational purposes; the task of deciding subjects is how to apportion that time is not light. Physical very exercise will almost always find a place on the time-difficult,

table, and will be highly appreciated by the pupils. "Reading, writing, and arithmetic," or their successors, "English and mathematics," generally appear in any course arranged for workers (not chosen by them), but teachers are driven almost to despair by the well-nigh hopeless task of revealing to the pupils something of the beauties of English Literature in an hour, or perhaps two, per week, when the foundations upon which they must build are, at the best, inadequate, and the pupils are neither well graded nor few enough to permit of much individual instruction. It is found easier to interest them in woodwork, or even elementary science, than in mathematics or English Language and Literature. Probably their interest is most readily sustained in something like this order: dancing and physical drill; handicrafts or lessons involving practical experiments; literature (when lessons are not limited to gramespecially in matical niceties); and mathematics. Girls often seem to differ widely from boys in their appreciation of subjects, preferring literary classes to "handicrafts"; but it must be remembered that the classes generally provided for them are "cooking, sewing, and housewifery," which are too nearly allied to work to have much recreative interest. It should never be forgotten that to most girls mending and cleaning are part of their home duties; and thus their classes, though possibly more immediately useful than those of the boys, are not nearly so entertaining. Evidently, factory employers who establish domestic economy classes for their girl-workers consider them as housewives of the future, not as factory workers. Otherwise, how is it that in, probably, the finest factory school for girls existing in England to-day, the classes are confined to "Gymnastics, Needlework, Cookery, and Housewifery"? It is a remarkable school, with a staff consisting of a head mistress and eleven assistants, all fully trained and qualified, but "the curriculum

the case of girls.

is framed with the view of training the girls to become proficient housewives." The tragedy of a factory girl's life could scarcely be expressed more eloquently! She toils in the factory to earn her daily bread; she often drudges at home, because it is expected of her; and when "education" is granted her, it is merely that it may fit her to become a "proficient housewife". As a thinking, sentient being she is given little or nothing; she is trained to work, not to live. Moreover, she is trained for two entirely different types of work, in neither of which can she hope to attain the ideal. She is hardly likely to rise to an important post in the factory, nor dare she hope for such a home as she may learn to picture. No doubt this factory school is excellent in its way. Cottages, built specially for the purpose, are managed entirely by the girls in their third year; and the apparatus includes kitchen ranges similar to those to be found in most working-class homes in the neighbourhood. As a Domestic Training School it is excellent, and possibly the nation will follow in the footsteps of this employer and compel all girls to become "proficient housewives"; but should they not also be given some opportunity of acquiring wider knowledge?

In schools for boys the curriculum is less limited, A w and "what to teach during the few hours which can ran subjects is be devoted to education "is described as "the most generally knotty problem of all" by a master who solved it permitted to boys. by devoting two separate hours weekly to gymnastics and two to a handicraft or experimental science. This, he said, left "a paltry two hours to satisfy the claims of many other needful subjects." Geography and History he "discarded, because they consist largely of the teaching of facts which any intelligent lad can gather himself. Mathematics had strong claims, partly from a utilitarian point of view, but mostly from its value as a training in careful and exact thought, a quality the working man does not

possess. One hour, therefore, was ear-marked for Mathematics; but," he says, "we regard a logical statement of a problem of primary importance. We disregard all rules of purely academic interest, and also all calculations involving unwieldy and impractical quantities." The remaining hour is devoted to "some systematic teaching of their mother tongue." "If, then, the ideals of our factory school were realised," says this master, "we should develop, as our highest product, a lad sound in heart and lungs and muscles; able to think in a logical manner; to express his thoughts in good English by word of mouth or in writing; to appreciate the best that has been written in our language; and possessing a fair amount of manual dexterity." an ideal may be beyond attainment, but the fact that, in a few factories in England, it is actually animating those to whom the care of the young workers is entrusted, may serve as an inspiration to others.

Opinions differ concerning compulsory education.

There is considerable difference of opinion as to whether it is desirable to make continued education compulsory, but there appears to be no doubt that the power of the employer in the matter is paramount. Some of those who desire to see an extension of education plead that facilities should be compulsorily provided for the young workers, who should be free to avail themselves of them or not as they pleased, for they say: "The present system of voluntary attendance at evening schools entails advantages which it is extremely desirable to retain, and which it would be impossible to preserve under any system of compulsion. . . . The good qualities of the evening student are in part the outcome of the bad conditions from which he suffers. . . . The average evening student is made of better stuff than the average human being."1

On the other hand, Mr. Albert Mansbridge of the Burnie and Jennings, op. cit., p. 5.

Workers' Education Association says: "Only 'comoulsion' exercised through the employers can remove disabilities placed in the way of many young people by the conditions of their employment. . . . It is for this reason, chiefly, that we should support measure of statutory obligation to remove them." 1

Possibly the explanation of this difference of opinion may be the fact that the former specially desire technical, the latter literary, classes. question is not clear cut, because compulsory continued education practically involves limitation of working hours for young persons.

In Scotland, the time of employment, plus the time of education, must not exceed the period of employment permitted by Act of Parliament,2 and the general opinion of experts seems to be that for girls, at any rate, continuation classes are not desirable without some reduction in the hours of labour.3

Concessions to workers can only be made universal by compulsion. Though the employer's true interest may lie in this direction,4 it is not so evident as to obviate the necessity for vigilance on the part of the nation. Just as short hours were actually beneficial to the cotton trade, but nevertheless had to be made obligatory, so continued education of the rank and file of the workers will have to be enforced by law.

Individual employers led the way for the first The example legislative limitation of hours, and we may still learn and the experience much from individual factories. There is, however, of individual in addition to these local examples, the more extensive employers may lead experiment with compulsory continuation classes in the way for Germany, which deserves close examination by any legislation. nation contemplating legislation on the subject.

A. Mansbridge, Continuation Schools, edited by M. E. Sadler, chap. xi.

<sup>&</sup>lt;sup>2</sup> 8 Edw. vii. c. 63, s. 10 (5). ³ [Cd. 4757], 1909, p. 202.

<sup>4</sup> Vide pp. 217-20.

We may briefly outline the experience of one firm in the matter of compulsory classes. In 1900-1, they found that 14 per cent. of their employees under 17 years of age were attending evening classes in the town schools. The firm offered to pay all fees for those who made 60 per cent. of the possible attendances. The numbers increased in the next year to 38 per cent. of the workers under 17; the scheme was then extended to include all males under 20. In 1902-3 it was found that 73 per cent. of those under 17 had joined classes, and attendance was made compulsory. In 1904-5 the standard of compulsory attendance was raised from 60 per cent. to 85 per cent. of the possible attendances. The scheme worked well, and was extended to girls, attendance being at first optional for all, then optional for those between 17 and 20 and compulsory for all under 17 years of age. Three nights per week these young people are expected to be at school, but certain concessions as to time off are made to them.

Very different tales, however, are told by other firms. One hears of fifty entering a class, of only forty actually attending, and only six completing the course. Compulsion alone will not, solve the difficulties which lie in the way of continued education, but it appears to be a necessary step in the process. The State should consider whether it can safely permit the power of compulsion to be used, abused, or left unused by employers.

Libraries.

Means less direct than classes are frequently adopted by employers with a view to improving the intellectual standing of their workers. The chief of these is probably the provision of books to read. As in the case of classes, those concerned with the technical side of factory work may be considered to have the most direct bearing on the productivity of the worker. However, technical libraries are not as frequently found in factories as those of a general character; and even before the time of universal compulsory education factory libraries were by no means unusual. One, founded more than sixty years ago, now numbers over 4000 volumes. 1848 we find a factory library with 700 volumes,1 and another in 1857 with 1300.2 Occasionally a library has been established by the employees themselves, and it is by no means unusual to find a small charge (even as much as twopence per week) made for the use of reading-rooms and the papers and magazines there and the right to borrow books from a circulating library. Sometimes an attempt is made to guide the younger workers in their choice of books; sometimes reading clubs are established. It is noticeable reading that a number of the clubs which aspire to read the clubs, most difficult books are those organised and managed by the workers themselves. It would be interesting if records were kept of the books factory workers choose to read. In some cases, the employer makes an arrangement with a local library, whereby books are brought to the factory once a week. The workers are usually allowed to change their books more frequently, if they so desire, by going to the library. Magazines published periodically in connection with factories serve very diverse purposes. They are works sometimes mainly advertising media for the firm; magazines, but occasionally they really interpret the minds and feelings of the workers. The crude attempts at grandiloquence to be found in some factory magazines are frequently the evidences of genuine interest on the part of employees, who devote much energy to the production of a journal which deals with the doings of themselves and their associates. Though sach magazines may not appeal to the general public, they are of distinct value in the social life of the individual factory.

<sup>&</sup>lt;sup>1</sup> Factory Report, June 2, 1848, p. 11. <sup>2</sup> Reports 1857 (2), vol. xvi. p. 235.

hands,

Music is recognised as an important element in education, and factory workers, as a rule, will be found keenly appreciative of it in some form or other. establishment of a brass band, which is now frequently a conspicuous feature in the factory life, is perhaps of little educational value. Indeed a band, in proportion to the degree of show attached to it, is apt to be detrimental to the general factory life. Said one Welfare Secretary: "The worst of the band is that the management import professional men into the factory, and give them jobs they cannot do, for the sake of the band. And when one of your own factory hands becomes proficient in playing an instrument he goes off to something else!" However that may be with bands, singing classes commonly prove of great benefit to all concerned. One hears the idea of "singing at work" ridiculed, but it is no uncommon thing for factory girls to sing at work, even where no encouragement is given. They sing anything, hymns and comic opera contribute to indiscriminately, until they are bidden to cease. little training can improve the quality of the singing, while exercising some control over the choice of song, it is not to be despised. Overlookers say that work often proceeds more quickly while the girls are singing. At any rate, singing classes are generally greatly appreciated by the workers themselves, and appear to have comparatively few difficulties connected with them.

and singing classes

the mental development of workers.

## 3. PERSONAL DIGNITY

Many employers fail · to consider their workers' feelings,

The way in which some great firms disregard the feelings of their workers is lamentable, and that their attitude is so calmly tolerated is both surprising and pathetic. It may not wound the dignity of a firm for it to say, that when it pays for holidays, it performs "acts of grace . . . not included in the contract of employment," but when it distinctly tells its em-

ployees they " are not entitled 1 to any payments for holidays or other absences?" or to any share in the profits, and then institutes a profit-sharing scheme and pays for public holidays, it places an employee in the difficult position of one bound to receive less than others for services rendered or to accept what appears to be charity. The firm which violates the personal to the great dignity of its individual employees does not secure disadvantage of both for itself a trustworthy staff, nor does it consider the parties. true welfare of its workers. It is much better for all concerned that hard-and-fast rules should be laid down; there may well be a sliding scale, but it must be definite, and not depend upon the caprice of the employer. "If you are not late, thus and thus shall your diligence be rewarded." "If you are regular, you shall be paid for holidays." "If we make ten per cent. profit, you shall have a tenth of it." These statements are definite and dishonour no one; but to say, "If you are not late, we may give you a prize," or "If you are regular, and acknowledge our beneficence, we may by an act of grace pay you for your holidays, or even give you a share in the profits which are ours, and to which you are in no way entitled," surely is to put too great a strain upon the patience of the self-respecting employee!

self-respecing employee!

Here is an example taken direct from the printed pamphlet of a well-intentioned employer which shows how completely such a man may fail to feel with his employees. It refers to the bonus granted in a profit-sharing system. "It should be clearly understood that this bonus is given on the understanding and express condition that the depositor has no right whatever to it. The bonus is a pure gift and may be withheld at any time, without notice, either wholly

or in any particular case."

It cannot be well for the firm—to say nothing of More the individual—that its employees should be willing to courtesy,

<sup>18</sup>Italics in the original.

take money to which they have "no right whatever".1

Let us assume that an employer would never be capricious in granting or withholding bonuses. he must have some basis for his actions, and he may well vouchsafe to his employees some knowledge of less secrecy, this basis. Even if he said no more than "profits permitting and conduct warranting," and reserved to himself the sole right of deciding thereon, it would take out the sting of the statement, even though it altered the facts not a whit. "That secrecy has been a good deal overworked is now one of the commonest admissions. . . . A great deal more information about employers' methods can be given to the workmen without the slightest injury to the business." 2

and wider the part of the employer

Often all that is lacking is consideration for the sympathy on feelings of the workers. It may be said, "If they get the money they don't mind how"; and this is the attitude of many employers. But some workers do mind; and it would probably be better if they all did. It is not for an employer of fine feelings to blunt their susceptibilities, but rather to give them credit for feelings as fine as his own. One employer, in opening a club connected with his works, said: "A strong spontaneous expression has come to me from the employees, which accords perfectly with my own ideas and sentiments, that this club should not be regarded as a charitable institution, but should be selfsupporting. . . . None of the employees . . . I am thankful to say, are in need of charity. They are self-respecting, self-reliant, and self-supporting."

bring their own reward.

This conception of the workers' dignity can be preserved throughout the whole factory life, and firms which have been careful to respect the feelings, and even the prejudices, of their employees have found the results beneficial. Where punishments which wound the dignity of workers have failed, rewards which

<sup>1</sup> Italics in the original.

<sup>&</sup>lt;sup>2</sup> J. G. Brooks, Journal of Social Science, N.Y., 1904.

recognise their merits have succeeded; and it is noteworthy that "natural rewards" prove more effective than artificial ones-that is to say, time off for holidays in place of time saved by industry, or promotion for conspicuous service, are more highly appreciated than mere money prizes. That the workers should recognise the justice of any reward or punishment is always to the good, and efforts to render them responsible for the discipline of a factory generally meet with considerable success. An early attempt in Some this direction may be noticed. While weaving was attempts to still largely a home industry, in 1829, an employer, discipline to vexed by the disappearance of men to whom he had met with advanced money on account of work to be done in considerable their homes, proposed to pay his workmen only when success. the goods were brought to him. The men would thus have had to buy on credit, and to avoid this they formed a society, to indemnify the employer from loss if he made an advance. A weaver applying for work was referred to the society, and only with their consent could he be employed. After the workmen thus became responsible for the money advanced, less than one-five-thousandth part is reported to have been embezzled. The employer in return had to agree to pay the same price to all weavers for the same work.1

Other examples of this nature might be cited, but the functions of such a society seem to have been rather arbitrarily divided between Trade Unions and employers, and though attempts are now being made to render Trade Unions responsible, to some extent, for breaches of factory discipline, their possibilities in this respect have been generally ignored. Meanwhile some employers have devised various methods by which they hope to distribute responsibility. Committees of workmen are frequently formed, and these vary from a general "Works Council" to a

<sup>1</sup> Reports, vol. xxiii., 1840, pp. 99-100.

Any responsibility given to their representatives should be definite.

though its extension should be

gradual.

small departmental committee. Works Councils are sometimes expressly denied any share in matters which workers or to concern discipline or wages, their attention being confined to "all the many points which do not come under those headings. They may then "collect direct from the workmen suggestions for the improvement of their surroundings, and put the matured proposals before the Directors for approval." One Council, with powers so restricted, was reported to meet only on special occasions, as it felt that it had no definite function to perform. An employer who has attempted to establish what he calls "diffused management" says that experience shows "that the best way to improve management is not to make too rapid strides in promotion, but to commence to raise to more efficient service by the formation of committees in each department." From each of such committees are drafted one or two representatives to form a Council, "who can take a broader view of management." There are several Councils, and from these are drawn the Directors. "We do not take a man as a Director who has not gradually worked up to the highest position in his own department as manager." The committees in this case deal with breaches of discipline, but their finding is subject to revision by the Chairman of the Company. It is possible that "a few nice, mild employees on the Board" may only strengthen the master's hands; 1 yet employers' attempts to "diffuse management" may fit the workers for further responsibility of this kind. They possibly indicate a way in which industry may be "governed by rulers appointed from below." 2

A sudden transfer of authority seems impracticable,

No sudden transition in workshop management is likely to prove practicable; but the experiments of employers, even though not completely successful,

<sup>&</sup>lt;sup>1</sup> G. D. H. Cole, World of Labour, 1913, p. 334.

<sup>\*</sup> Ibid., p. 383.

may guide future developments. Certainly a number of them are sincerely trying to help their workers to educate themselves in methods of management. Sometimes regular courses of lectures on factory management are held; but the most important thing is that definite responsibility of some kind be given.

Only responsibility fits men for further responsibility fits men for further responsi-

In such matters, for example, as the prevention of further petty theft within a factory, much might be accomplished. Instead of employees being "liable to be searched on leaving the premises," and demanding that "searching" be carried out "in the firm's time," it might be possible by a diffusion of responsibility to prevent theft, rather than to punish it.

By Welfare Work in general employers hope to stimulate in each employee a sense of individual responsibility, but there is room for much more definite and conscious effort in this direction. It is worth noting here that "Works Committees" are often without any real connection with the workers. In one case, for example, employers who, even at first, only ventured to admit two representatives of the foremen, to a committee of ten, subsequently severed even this connection, the committee being entirely composed of the Directors' nominees.1 It is generally simpler merely to impose authority upon the workers, but it cannot prove as satisfactory in the end.

The question of insurance is very intimately Insurance related to that of personal dignity, for in many cases schemes, employers make provision for their employees in times of sickness or other trouble. To some extent the National Insurance Act has rendered this obligatory, and so removed it from the realm of Welfare Work, but many supplementary insurance schemes are still in force. It is not intended to discuss their details

<sup>1</sup> Experiments in Industrial Organisation, pp. 202-3.

here, but we may consider the personal relations involved.

if based on contractual rights, and not on charity,

essen the workers' inxiety for the future.

Some guarantee as to continuity of employment

The fundamental idea of insurance is that, for contingencies which are only probable, it makes positive provision. Certainty is essential. Now, in many cases employers provide generously for their workers; but, far too often, there is no specific contract, and the provision assumes the form of a bounty bestowed upon a deserving worker by a considerate superior. This is really opposed to the spirit of Welfare Work, as it is coming to be understood by those who carry it out. A recognition of the rights of the workers, not a charitable attention vouchsafed to their needs, is the foundation upon which some employers, at least, are building a new ideal of industrial relationships. The Directors of one firm, for example,1 "felt that, to enable any workman fulfilling the necessary conditions, to look forward to a pension 'as a right, and not as a matter of charity, which could be given or withheld at their pleasure, would be a means of lessening anxiety as to the future." Anxiety as to the future saps the energy of a worker. If it can be avoided, he is happier; and his work improves. So, not only for sickness, but for old age, and for death, employers have decreed it wise to make definite provision. If only they could understand the cruel anxiety which the workers feel, they would all realise the deadening effect it has upon industry. Uncertainty haunts the workman throughout his existence; his very work is often uncertain. Merely to guarantee that (1) no worker shall be dismissed without a week's or a fortnight's notice, or (2) suspended without the consent of some recognised authority which is removed from the influence of personal annoyances, is to give new energy to the workers. It may be suggested that fear of dismissal is a necessary spur; but experience proves that it is <sup>1</sup> Vide Appendix VI.

nothing of the kind. Fear is a paralysing taskmaster. It is hope which spurs men on.

By promising continuity of employment, an similarly employer obtains the right to ask for continuity of renders them service; and this brings an immediate recompense. efficient. Changing workers is an expensive process,1 and one which a wise employer tries to avoid. Here, as in so many other cases, the interests of employer and employee are reciprocal. Workers respond readily to the manner of their treatment. The employer who respects their feelings, even when he does not understand them, will in return receive respect; and, further, he will find no more faithful service than that of a self-respecting worker. His own selfinterest suggests even more consideration of his workers than one would imagine from the words of an American who seems to place profit above all else, and who says: "Employers have recently learned that an important factor in lowering costs is permanence in the labouring force. . . . Workers, when they know they are likely to be discharged any moment, do not have the interests of the business at heart, and do not give their best service. . . . From the management's standpoint, the pension is the premium he is willing to pay for continuity of service, and the increased efficiency it affords." 2 But without the brutal candour of such a writer one may realise the danger of anything like "deferred pay". He advocates it as a method of holding the workers, and apparently sees no further. But "deferred pay" may become a source of annoyance to them.3 and workers who are annoyed are not efficient. Insurance should be on sound actuarial lines, and every worker should be

<sup>1</sup> N. A. Brisco, Economics of Efficiency, 1914.

<sup>\*</sup> Ibid., p. 76.

3 "We think it will ever be difficult to consolidate organisation in any body where a system of deferred pay either in the form of perquisites or pensions prevails" (23rd Annual Trades Union Congress, Parliamentary Committee's Report, p. 24).

made acquainted with the conditions before being expected to join. Above all, there must be some recognised "surrender value" of every policy.

This is important even from the employer's standpoint; for men who cling to a business merely on account of "deferred pay" are those whose service is not indispensable. Everything must be open and aboveboard in the interests of all concerned. "We insist upon your being insured; for we cannot have you worrying about the future while you should be thinking about your work." That is perhaps all the employer can say without risk of infringing on the liberty of the employees. Still, it does not seem unreasonable that he should stipulate the amount of the insurance, in view of the wages paid; and possibly (indeed, probably) facilities above the average can be given by a firm employing picked workers under conditions which are above the average. But charity must be quite ruled out on the one hand, and despotism on the other. Justice is all that the worker asks.

Despotism and charity alike

There is, of course, no reason why, as occasion offers, employers should not make presents to their workers—at marriage, for instance, or to celebrate an anniversary. But the basis of the relation between them must be simply justice. To quote again the words of Mr. D. H. McGregor: "Whatever objections may be made from the point of view of democracy to the philanthropic nature of such schemes will become less and less as the idea of employment... is felt to *involve* in its very nature this wider endeavour."

must give way to justice.

1 The Evolution of Industry, 1911, p. 144.

## CHAPTER V

## THE SCOPE OF THE WELFARE DEPARTMENT

We have dealt with the relation of work to worker. with the industrial environment and general conditions of work, and with incidental aids to the workers' welfare. Let us now pass to a consideration of how the Welfare Department deals with each and all of these.

It must be borne in mind that no Welfare Department actually accomplishes all that is here described; but nothing is included which is not attempted in at least one factory. A superficial inspection of a factory can afford little reliable information as to the value of the work carried on by the Welfare Department, and statements made by proprietors or directors are necessarily somewhat prejudiced. The reading of printed matter about a factory often gives an impression absolutely contrary to that conveyed by a visit to the works. Good theory and excellent Even with intentions are not safeguards against invidious prac-intention, tices. Even if an employer desires nothing so much as the good of his workers, how can he, with the burden of business upon him, enter into a minute examination of individual needs and interests? A striking instance of the need of expert knowledge and specialisation is that of an energetic and enthusiastic employer carrying on his family traditions in a business employing between 2000 and 3000 workpeople. With the hearty co-operation of one or two members of his family, he confidently attempts to

employer can no longer, unassisted, care for his workers' welfare.

an individual know personally all his workers and their family joys and sorrows. He is deeply and sincerely conscious o' his own responsibility, and the variety of ways in which he shows his interest in his employees is astonishing. He has attempted nearly everything that other employers have attempted, and he has devised a number of schemes of his own. But many of them do not work, and he seems ignorant of that fact. He has built kitchens, and is unaware that they are badly managed; he has provided baths, and does not know that they are neglected; he has founded clubs, and is unconscious of the fact that they are not well run. He expends an extraordinary amount of energy and devotion, endeavouring to manage everything, either directly or through members of his family, and this is an impossible task. There is a certain amount of personal contact. He is a real human being to his employees and to their families, but he recognises personality on their part only in so far as it expresses itself through the institutions established by him. He encourages suggestions, education, games; but everyone who comes into the business is stereotyped with his ideas. Few, if any, of his employees have the energy and enthusiasm which characterise him, and details everywhere suffer from lack of careful attention. He says that he has for years looked unsuccessfully for a foreman who will run a department in accordance with his desires; and he is unaware that he himself stifles the initiative for which he searches in vain. He is master absolute master—and his employees but servants. He treats them excellently, as he understands excellent treatment; but an observer wonders how human beings can be content to be so dominated by another

<sup>&</sup>lt;sup>1</sup> If an employer impresses his will upon his workers he cuts away from them opportunities of carrying on the rude experimental process by which they may learn wisdom and find their souls (Vide J. A. Hobson, Work and Welfare, 1914, p. 126).

human being. The place lacks mental and spiritual vitality; and the reason seems to be the overwhelming influence of the master-mind. However extraordinary that mind may be, it cannot dispense with the minds of the workers, nor can one personality act and react effectively upon twenty-five hundred personalities.

The employer himself is obviously unable to An expert cope with this difficulty except by appointing Welfare is needed to study the Secretaries, competent officers to devote their whole problems time to these matters. What cannot be dispensed involved, and to carry with is an eye which sees the needs of the workers, out the work, and that is missing more frequently than the will to supply what the workers need. The seeing eye does not necessarily belong to a worker, for custom can make one blind; nor does it necessarily belong to a person of culture and goodwill, for the workers' own standards and tastes must be primarily considered. Goodwill, indeed, is essential, but it is not all that is essential. In the rush of factory life, only one who is at leisure from the economic turmoil has adequate opportunities of discovering the true wishes of the workers, how they can be guided, and how they can be gratified. It is most desirable, there-devoting the fore, that the Welfare Secretaries should devote the whole time whole of their time to Welfare Work. Indeed, the difficulty is to know how to limit the hours of such officers. They are needed in the morning early, and they are needed after work hours, and they feel that it is advisable to know what is happening all day long. Where several can share the duties, the matter becomes simpler; but generally a greater number of officers merely indicates increased duties. Where night-shifts are worked, the matter is even more complex. To be confronted with a task which it is a physical impossibility to perform is paralysing, and a wise Welfare Secretary, like a wise Director, delegates many duties to others, and

merely superintends the work of the whole department.

The Welfare Secretary

It is by a wise choice of personalities, through which to extend the influence of his own, that a leader most powerfully and consistently controls a multitude. It is no light task which he entrusts to the Welfare Department, and he must exercise great care in selecting as its chief a man or woman on whose judgment he can rely. In practice, if a man is in charge of the department, he needs the counsel and assistance of a woman in all matters relating to women and girls. Where the department was originally placed under the direction of a woman, its extension has generally necessitated the appointment of a man to assist in the work among the men and boys, and to ensure due consideration of their interests, though in some cases the co-operation of men already engaged in the business has been deemed sufficient. The fact that frequently no woman of education, standing, independence, and initiative has been associated with the management of a factory, makes the appointment of a woman Welfare Secretary of vital importance. There is, of course, no need to insist that, where a man and a woman are both appointed as Welfare Secretaries, one shall be placed in authority over the other. But there must be complete co-operation in the work of the two sections, and there must be unity of purpose throughout. Where two sections of the department work apart —one for men and boys, one for women and girls the results do not seem altogether satisfactory.

must have (I) business capacity,

The Welfare Secretary must have considerable organising capacity. All arrangements must be made methodically, and all the work must be done in a business-like manner. It is an advantage if both the head of the department and the junior officers have had some experience in processes of manufacture, either those of the factory conceined or of some

other. In America it appears to be usual for a (2) a know-Welfare Secretary rapidly to pass through a course of ledge of the work done, instruction in every branch of the work—actually performing, so far as limited skill permits, every operation which workers are called upon to perform in the factory he or she is to supervise. This method is not very frequently pursued in England; but it has distinct advantages, as it gives a better understanding of the labour involved in each several task. A Welfare Secretary needs sympathetic understanding (3) symof the workers, and tact in dealing with difficult pathy, situations, which are bound to arise in adjusting relations between large numbers of individuals. To direct the good intentions of an employer into channels where they will really benefit, and not annoy, the workers, often needs infinite tact. To issue and (4), commands is easy; to enforce obedience perhaps above all, tact. not difficult for one whose word controls the source of livelihood; but to command so wisely that obedience is but the natural expression of the individual wills necessitates a comprehension of individuals and infinite tact. The wise Welfare Secretary does not attempt to dominate the social activities of the workers, or even to direct them; but merely to observe their trend, to encourage what is deemed to be good and to discourage what is believed to be evil. For instance, a wise use of leisure is of vital importance, even with regard to the work of the factory. But the Welfare Secretary must beware lest in arranging for recreation he unwittingly infringe the right of the employee to complete freedom during leisure hours. This is no imaginary danger. There are periods of leisure which are necessarily spent in the factory or its precincts, and these demand the wise vigilance of some responsible person. the breaks for tea, for instance, a little care in providing comfort for the workers may be of infinite 1 Vide supra, Chapter IV. (Part II.).

benefit to them and indirectly advantageous to output.

To sum up, business capacity, knowledge, sympathy, and tact—these are essential for a Welfare

Secretary; and the greatest of these is tact.

The ideal factory is equipped with all appliances devised by modern science.

Let us suppose that the employer has selected the right person for the position of Welfare Secretary, and let us briefly consider the factory in which the work is to be carried on. The ideal factory is, of course, non-existent, but nothing is described which

does not actually exist.

The ideal factory is neat, even if not beautiful; and there are adjacent grounds devoted to gardens and playing-fields. The ventilation, heating, drainage, and lighting have all been made the subjects of expert consideration. The floors and walls are constructed, and the machinery placed, so that it is possible to maintain a healthy state of cleanliness; and no arrangement has been made without due regard to the number of workers who will be required in any room, so that there will be no overcrowding or inconvenience of any kind.

The workrooms have been the subject of special care. The machines are effectively guarded, and ample provisions have been made in case of accident. Every workroom has its first-aid cupboard, and some ready means of communicating with an ambulance department. Provisions for escape in case of fire not only fulfil the requirements of the law, but render frequent fire - drills practicable. Lavatories and sanitary conveniences are private, and yet easily They are adequate in number and accessible. suitable in arrangement. Perhaps there are bathrooms in addition; possibly a swimming-bath and a gymnasium. At any rate, there are cloak-rooms, dining-rooms, and rest-rooms such as will please the workers and satisfy their needs.

Such factories were not built in the days of the

Industrial Revolution, and the vast majority even now The Welfare leave much to be desired; but there is undoubtedly Secretary must adjust a tendency to build new factories on some such plan arrangeas that here outlined. Adaptations are made in ments to older works; and, although it is more difficult to changing remodel an old, inconvenient factory than to build a convenient one, there are not lacking examples of old factories which have been adequately adapted to the progressive needs of the workers. Movement from a city to a suburb, or to the country, is often associated with the building of a more convenient factory. It must not be supposed, however, that a factory can be so built that it will be convenient for ever. Adaptations will be necessary with every development. To keep a watchful eye upon the whole of the factory environment, so that it may always be convenient and comfortable, is the first duty of the Welfare Department.

We may now consider the relation of the depart- He keeps ment to the individual worker. It should record all detailed records: available information concerning each worker, for reference as occasion demands. For this purpose careful and detailed records must be kept; and it is usually found most convenient to do this by means of a card system. The cards in use in factories differ greatly. A specimen record card, given in Appendix VIII (No. 1), is one of the simplest in use. Rightly interpreted, it serves to indicate the scope of the Welfare Department.

Upon the Secretary devolves the duty of making he prothe first selection of workers. He or she determines visionally selects whether or no an applicant is fit to be admitted into workers, the factory at all in any capacity. In many cases applications are filed in advance. Occasionally an application form, such as that given in Appendix VIII (No. 2), has to be filled in by the worker, with the Secretary's assistance; and this is only the first of many opportunities of giving help, especially to the

<sup>&</sup>lt;sup>1</sup> Clerks and manual workers are engaged in the same way.

young worker who is plunging into the unknown world of industry.

The decision as to the general suitability of any applicant is left to the Welfare Secretary, who is advised by a doctor on questions of physique. With regard to educational attainments, either some recognised standard such as a school certificate is accepted, or the applicant is submitted to an examination, oral or written. From general appearance and style, some estimate is formed as to whether he is likely to make a good worker and a desirable com-

panion for other workers.

The Welfare Secretary records the home address of the applicant; and a knowledge of the locality often indicates the type of home from which he comes. Occasionally the homes of young applicants are visited, and the parents are consulted with a view to ascertaining what possibilities lie before the boy or the girl. Commonly, the parents of young applicants are asked to sign agreements that their children shall attend school and receive medical and dental treatment as directed by the employer. Whether the boy or girl lives with the parents or not; is considered of great importance. If not, particular care is taken to ascertain why not. If the worker lives far from the factory, employment may be refused on that ground alone, if the journey is thought to involve too great a strain. When necessity arises, the Welfare Department has to make all possible adjustments for the transport of workers, and sometimes their fares are actually paid by the employer. Occasionally it is deemed advisable to provide hostels or other accommodation for those who are unable to find suitable lodgings in the neighbourhood.

The Welfare Secretary records what previous experience the applicant has had, and, as far as possible, satisfies himself as to the reliability of any

statements that are made.

In England, the Welfare Department rarely attempts much more than this in selecting workers. Though in America Miss Catherine Blackford claims to have made an exact science of the selection of workers for particular kinds of work, in England, at leaving the any rate, it is left to the "practical men" to estimate, to depart as best they can, by virtue of their experience, the mental suitability of any individual worker for particular managers. work. The final selection is thus left in the hands of the man who is to be responsible for the execution of the work.

It is not intended to suggest that the Welfare Department engages a number of workers it would like to employ, and then sends them round to departmental managers, until one is found to have a niche to fit the worker. The whole of the Welfare Department's selection is carried out in reference to the need for certain workers. But, since the interests of the whole establishment must be considered prior to those of any special department, the fundamental requirements of the Welfare Department must be satisfied before any worker is permitted to enter the factory. It is quite possible that a worker whom it recommends may be rejected by the manager for whose department he was intended; but, with experience, the Welfare Secretary soon learns to discriminate with considerable success.

When he has chosen the worker, and the depart- The Welfare mental manager has agreed to his appointment and Secretary exercises determined the work which he may reasonably be ageneral expected to perform, the rate of wages is fixed more supervision over the or less automatically. In the factory whose card we wages and are considering, a "time wage" is stated, a minimum workers, below which the worker when on piece-work is never supposed to fall except on account of illness. Any falling off demands an immediate report to the Welfare Department. If, at any time, the fall is occasioned by failure of machinery or other cause, for which the

individual worker is in no way responsible, the "time wage" rate is paid. If the worker is considered responsible, the case is carefully examined, and he is warned, transferred to other work, or even dismissed. Should the state of his health be considered the cause of the failure, the medical officer is called in

In addition to considering the wages of individuals, the Welfare Secretary co-operates with the heads of other departments in arranging methods of determining wages and bonuses. Group payments, for instance, may appear very effective to a departmental manager, but may, in practice, prove annoying to the workers. It is essential that the latter should understand the system upon which they are paid. principle, recognised by law in so far as it demands the specification of particulars, can be extended by a Welfare Secretary, who is in a position to dispel disquieting doubts by an authoritative explanation. A system of bonuses or of premium payments loses its effect unless it is thoroughly understood. Welfare Secretary must be especially careful when any system is established, first, that it will not cause workers to exert themselves unduly; second, that they will feel that their efforts are justly rewarded. Every bonus, every advance in wages, should be recorded, so that at the periodical revision of wages the Welfare Secretary may be able to pronounce an opinion as to the respective claims for increased wages of individuals in different departments. He can make comparisons which departmental managers are not in a position to make, for their outlook is limited to their own departments, while that of the Welfare Secretary should be wider.

their instruction. A further duty of the Welfare Department is to superintend the instruction of the workers. This is of two kinds, that of the workroom and that of the classroom. Departmental managers are immediately esponsible for the first; arrangements for the second ire left to the Welfare Secretary, though technical classes are best arranged in conjunction with the neads of departments. In arranging them, it must never be forgotten that the whole organisation of the factory is based upon work. The men and nomen, girls and boys, assemble to co-operate in production. Classes must therefore cause as little nterference as possible with factory routine; and those held during work hours must be carefully irranged to suit the convenience of those who direct the work. Classes for young workers are found to be most beneficial when held in the daytime, and time is frequently allowed for them. It is probable that continued education should not be obligatory inless some such concession is made. With the co-operation of departmental managers classes can be managed with little friction; without it, they are practically impossible.

The instruction most highly appreciated by workers is that in physical culture. The works symnasium is a source of great pleasure to the workers. One or more special instructors are needed upon the staff of the Welfare Department; and the employer finds himself recouped by the improved health of the

workers.

Their health may be considered the especial their health, province of the Welfare Department. It keeps careful records of illness and accidents, and endeavours to discover whether they occur from preventable causes. Fatigue being a predisposing cause both of illness and of accident, the Welfare Secretary makes a special study of fatigue, and endeavours to prevent it—at all events to prevent overstrain. "With subdivision and the loss of craftsmanship, monotony of work in greater or less degree is inevitable, and may well be accepted as such. For when once monotony is recognised as a real hardship, and is in

itself a source of fatigue, rational means of relieving it may be sought, in shortening hours of monotonous labour and alternating work of different kinds." 1 The duty of deciding what hours of work and intervals of leisure are most satisfactory devolves upon the Welfare Secretary; and, without his knowledge, no worker is permitted to work overtime. He arranges when, for what length, and upon what . conditions holidays shall be granted to the workers, in addition to those required by law, and he adjusts them as best he can to suit the convenience of individuals, and that of the departments in which they work. Where necessary, he also arranges a satisfactory way of spending a holiday. The idea of a week or a fortnight of idleness and quiet enjoyment is rather an "upper-class" notion, but it is one which is readily adopted by workers, and the benefits of such an interlude are likely to be greatest where the need for rest is greatest. With a view to further safeguarding the workers' health, the Welfare Secretary, through the works dentist, makes certain that the workers' teeth are properly cared for; and, if all attempts to maintain health fail, the assistance of the works doctor and nurses is obtained, and adequate provisions are made for hospital treatment whenever it is necessary.

their recreation, The Welfare Department superintends recreation and the social side of factory life, although, if the Secretary is wise, much responsibility is left to the employees. Those Welfare Departments which lay the main emphasis upon the social side of their work miss the fundamental idea of a factory Welfare Department, which should be more closely associated with work than with play.

und insurance The Welfare Department deals with all questions of insurance beyond that which is mechanically arranged in accordance with legal requirements. It

1 T Coldmark Fatigue and Efficiences 1012 D 67

is recognised that worry weakens the workers; and, to prevent this, if not from humane motives, the employer makes some provision for old age pensions, and for allowances to widows and dependents. Probably it is best that such provisions should be on a contributory basis, and all schemes should be clearly defined. It is a Welfare Secretary's duty to see that workers fully understand the arrangements, to explain whatever puzzles them, and to give them the best facilities possible for providing against want. Workers are ready enough to insure, but their opportunities are limited. If "Works Funeral Clubs" replaced their haphazard funeral insurance, there would be an immediate gain to the working classes, who at present pay excessively for such insurance. If they are to be in a position to show what they consider due respect to a relative upon his death, insurance is absolutely necessary; the insurance companies, which provide facilities for this, are able to charge extravagant premiums. The question as to whether the workers should spend so much on funerals is not one for the Welfare Secretary to decide. His immediate duty is to see that their wants are supplied satisfactorily. He can, however, to some extent, guide their desires by making possible the fulfilment of those he wishes to encourage. A savings bank in the works, for example, will encourage saving, provided the workers trust the employer. Their instinctive fear is that, if the latter knows they are saving, he will cut down wages. some cases arrangements have been made for officials from a bank to come regularly to the factory to receive the workers' savings. Apart from permanent savings, they often desire to save temporarily for a specific object, such as an annual outing, or Christmas festivities. Even a pair of boots or a new garment means for the humblest workers a careful accumulation of funds. The Welfare Secretary therefore arranges for periodic saving upon a basis satisfactory to the workers rather than advantageous to the shopkeeper or the individual who, with an eye to a commission, arranges a "Money Club." "Money Clubs" 1 are commonly forbidden in factories, but the only effective way of abolishing what is, for the moment, convenient, is to arrange for something more convenient.

ne is, in a general way, responsible for discipline in the factory,

The Welfare Department is responsible, in a general way, for the discipline of the factory. Rules are, as far as possible, made to apply to the factory as a whole, not left to the caprice of individuals. Bad time-keeping, carelessness, and disobedience are punished according to definite standards, recognised throughout the factory. Indirectly the discipline is strengthened by suitable environment, and by wisely conducted instruction and recreation.

In determining the nature of rewards to be offered the Management seeks the advice of the Welfare Secretary. He is consulted about promotions, and all personal complaints must be made through him. With him lies the responsibility for seeing that no one is unjustly treated, and no one may be dismissed without his knowledge. Except for a serious offence against factory discipline, no one is dismissed without due notice. Sometimes during the last week or fortnight before dismissal, an employee is allowed time to visit the local Labour Exchange with a view to securing another position without unnecessary delay. This privilege can hardly be looked upon as profitable to the employer, but it is an advantage to the individual worker and to the nation.

and for conworkers.

When workers are asked to suggest arrangements sugrate treatment of for their own comfort, their proposals often seem crude, absurd, impossible. But a wise employer

<sup>1 &</sup>quot;Money Clubs" are formed in many ways; for example, twenty workers contribute sixpence each per week, and, by drawing lots, determine the sequence in which they shall have ros. to spend.

carefully considers their suggestions nevertheless; and, broadly speaking, the most successful of the larger schemes are those which have some recognised means of consulting the feelings of the employees. The happiest appear to be those which are so small that personal touch has not been lost, but in such cases the characters of the employer and of the officers in charge are of supreme importance. The workers' peace of mind is really one of the employer's most valuable assets, and therefore he treats their desires with respectful consideration. Where the number of workers is great, to deal with them individually becomes increasingly difficult. Recognising Trade Unions as the most adequate medium for the expression of their wishes, an employer occasionally affords their officers facilities to collect subscriptions on the factory premises, perhaps even during the hours of work, and invites them to inform him of any cause for complaint as soon as it arises. Such complaints may be referred by the employer to the Welfare Secretary, who can easily deal with them if all that is needed is a slight readjustment of conditions. the matter is more complex, the Welfare Secretary may at any rate be able to give useful advice, for his records supply the most accurate information available concerning the effect of conditions of work on workers.

A Welfare Secretary has to serve three masters:
(1) the employer, whose interests are directly concerned with output; (2) the worker, whose life and happiness are involved; (3) the nation, to which both are of vital importance.

It is the employer who appoints and pays the Though ap-Welfare Secretary and the staff, and he expects them pointed by to justify their appointments on purely economic ployer, grounds, even though he may be actuated by other motives than that of self-interest. Hitherto there has been no attempt to entrust the appointment of a Welfare Secretary to anyone else, but it has been

suggested that he might be appointed and paid by a Trade Union. This would hardly be feasible unless the workers had a greater share in management than has yet been given to them.

the Welfare Secretary also serves

It need not be supposed, however, that workers are at the mercy of a Welfare Secretary and must the workers. necessarily submit to any arrangement which he deems desirable. Cases have occurred where the employees so strongly disapproved of measures adopted by a Secretary that a strike ensued and the officer had to be dismissed. This is an extreme method of evincing the employees' control, but there are others as effective, if less dramatic. Threatening to strike may suffice, or they may attain their object by tacitly declining the services of the Secretary and so rendering his efforts unavailing. If the Welfare Secretary fails, he is dismissed by the employer, even though his failure be due to excessive zeal in the latter's service. If an employer, for instance, desires ostentation, while the employees beg for a rise in wages, the Welfare Secretary must steer a middle course, at the risk of continually failing to satisfy either party. Fortunately, such instances are rare, for most employers who engage a Welfare Secretary are genuinely determined to promote the welfare of their workers, and will appreciate his efforts even if he does not take the exact course they expected.

He must demands of with the rights and feelings of

The employer desires a certain end; it is the duty reconcile the of the Welfare Department to devise means whereby the employer it can be attained without infringing upon the rights of the workers. To safeguard individual liberty and to respect

the workers. class feelings is the central problem of Welfare Work. To illustrate the difficulty of solving it, a typical question may be considered. How best can cleanliness be attained without infringing upon the workers' feelings of liberty? Is it better that a man should be compelled to be cleanly or that he should be free to choose, even though he choose to be dirty? The Welfare Secretary has to supply a practical answer to this question, giving, as far as may be, complete freedom, but making cleanliness so easy and attractive that the choice cannot be matter of doubt.

The most desirable arrangements will not be tolerated by self-respecting workers if they are made in a patronising manner, and arrangements made with the best intentions in the world will not become popular unless they fitly supply what workers consciously desire. Certainly, the desires of the workers can be stimulated by their employers; but placing volumes of Homer in a factory will not encourage a love of literature, and a cold, dark, dreary bathroom will do little to promote a love of cleanliness.

Very many are the ways in which an appeal can be made to the sympathetic understanding of the workers, but each is beset by pitfalls. The fact that workers' standards are commonly very different from the standards of those who make arrangements for them, leads to many a difficulty. Because workers dine at midday without napkins, some people think they do not appreciate tablecloths; because they will not toil at cleaning when they are tired with their day's work, some think they do not love cleanliness; because they will not accept charity, some think they do not desire good things; because they are not grateful for what they consider less than their due, some think them incapable of gratitude.

In most cases the underlying reason for the unresponsiveness of the workers lies either in the attitude of the employer or in the unsuitability of his provisions for them. The effect (especially the moral effect) of any arrangement must be considered from the point of view of those affected, and their standards cannot be set aside nor their rights infringed with impunity. The Welfare Secretary must exercise great caution lest he trespass upon the individual or

the class rights of workers. It may be that public officers have authority to enter homes when so instructed by the Government, which, in name at least, represents the people; but no individual employer or employer's agent can claim the entry into a home, except at the invitation of its head. The secretaries and nurses who visit the homes of employees must beware lest their position at the factory, and not the desire of the inmates, gains them admission. Most factory visitors are careful in their dealings with the homes of the workers, and no doubt they are frequently very welcome; but it is a risky undertaking, liable to become an unwarrantable intrusion. There are employers who throw open their own homes to their employees in a wonderfully simple manner, but they are few and far between; and the lack of reciprocity is always a barrier between those separated by social distinctions. Within his own home at least a man has a right to expect freedom from class distinctions, and any factory visitor who comes in a paternal or patronising manner is violating a tradition of which Englishmen are proud. It is greatly to be regretted that the way of patronage is often made so easy. Cringing workers are undesirable for economic reasons, for their service is likely to be eye-service; the man who can be relied upon to work in the same way whether watched or not, is the man who is worth most from an economic standpoint.

It is not merely upon the privacy of homes that employers, through their officers, occasionally intrude; they threaten the links which bind together the members of the same class. Too frequently the employer has "not attained to a conception of social morality for his men," and has imagined that, for them, virtue lies in docility. It may be laid down as a general condition that the employer, and the Welfare Department acting in his name, must never offer

<sup>1</sup> Jané Addams, Democracy and Social Ethics, p. 148.

sleeping draughts to the conscience or to the class-

conscience of the employees.

The sympathetic understanding of the workers, Only in so which must guide the Welfare Secretary at every step, far as he has sometimes led to the idea that he is the "repre-the confisentative" of the employees. But one who is ap-dence of the workers, pointed by the employer, and holds his position only does he beduring his pleasure, can represent the employees only representain so far as he gains their confidence. This he does tive. to an extraordinary degree in some cases, but by no

means invariably.

It is beyond the power of rules and regulations, beyond the power of legislation, to control the feelings of workers; and even though their feelings run counter to their true interests, they cannot be ignored, although they can be educated. The idea of paid factory inspectors was ridiculed by workers less than a century ago, yet to-day they look upon inspectors as their rightful champions. More recently, they viewed with suspicion the system of self-inspection, by means of Welfare Secretaries and similar officers, which was here and there voluntarily established by employers. But gradually they learned to appreciate the services of these officers, and now the principle has become sufficiently recognised to be incorporated in the law relating to one industry (Potteries), and it may be gradually extended.

We have considered the position of Welfare Secretaries with reference to the employer and to the workers. We may now glance at their relations with

the public and with one another.

As far as the general public is concerned, Welfare Though Work, in its best forms, is little known. Hasty ignored by the general generalisations are made by people who know it only public, as a form of advertisement. If the fact that commodities were produced under good conditions always proved an effective advertisement, it would

<sup>• 1</sup> Vide Appendix XII.

suggest a high sense of responsibility on the part of consumers! But, in practice, the efficacy of such an advertisement depends largely upon the nature of the product. It is high where food is concerned, apparently because cleanliness is deemed most desirable in the preparation of food. It is perhaps highest where the food is of the nature of a luxury, because the desire for cleanliness is then accompanied by the ability to pay for it. But in many cases where the consumer has no direct interest in the conditions under which goods are produced, those conditions are carefully watched over by Welfare Secretaries. It is safe to say that Welfare Work is less directly influenced by the general public than is commonly supposed. On the other hand, considerable influence is exerted over it by the experts who represent the public—that is, by the factory inspectors. They appreciate the value of all experiments in improved conditions of employment, and, by their approval, do much to encourage employers to make new efforts. They also spread the knowledge of any advances made.

his work is appreciated and assisted by factory inspectors.

Conferences

More, however, is needed in this direction, and the desirability of an interchange of ideas between those experimenting in Welfare Work has been strongly felt, and has resulted in the holding of Conferences of Welfare Workers. Two only have been held in England so far—the first at Birmingham in 1909, and the second at York in 1913.¹ Seventeen and twenty-seven firms, respectively, were represented at these Conferences. Addresses were given, and discussions followed; arrangements were made whereby those associated with Welfare Departments could compare notes, exchange visits, and discuss plans. The Conferences were believed to be of distinct value

<sup>&</sup>lt;sup>1</sup> They are not "Annual Conferences," as suggested in the Factory Report for 1913, p. 100, but two separate Conferences held by invitation of two employers interested in Welfare Work.

to those concerned. A more frequent exchange of ideas would be an advantage; it would prevent repetitions of mistakes, and stimulate to renewed activities. The chief difficulties in the way appear to be lack of frankness (which perhaps is unavoidable between rival firms), and a lack of knowledge as to the true significance of the experiments carried out in any particular factory. Only one attempt at an exhaustive and publicatreatment of the experiments of an English firm has tions prove as yet been published. It would be well if others Welfare would contribute similar accounts of their experi-Secretaries. ments. At present, most of the publications which deal with the Welfare Work of individual firms are little more than advertising media. Even these are eagerly studied by those interested in the work; but increased facilities for learning from the experience of others would be appreciated by the keenest Welfare Secretaries.

Of course, it must not be assumed that an experiment which proves successful in one factory will necessarily succeed elsewhere. The taste of individual workers is the criterion of merit for general arrangements, and particular circumstances determine the success or failure of any scheme of Welfare Work. Yet rules must be made for workers and laws for factories. Rules and laws alike are necessarily open to various interpretations, and both leave countless details unregulated.

The Welfare Secretary's duties become increasingly important and increasingly difficult as they pass beyond the range of regulation and enter upon the realm of personality, where it is necessary to adapt, to the individual, arrangements made for the many. This is the service which the Welfare Secretary renders the community—to restore the personal element, lost in the rush of material progress—to socialise the economic relation of employer and employed.

<sup>1</sup> Vide note supra, p. 39.

## APPENDIX I

# EMPLOYERS' INFLUENCE ON EARLY FACTORY LEGISLATION (THE TEN HOURS ACT)

# (a) JOHN WOOD AND WILLIAM WALKER

The part played by Wood and Walker in the Ten Hours Movement is thus described by Samuel Kydd: "Among those who have been least conspicuous but most helpful in the accomplishment of this great and good work, must be ranked the names of 'Wood and Walker,' the eminent worsted spinners of Bradford, in Yorkshire; their aid has been continuous, their labours incessant, and of the kinds most required. In public efforts for social and political ends, it may be truly said, 'money is power, and good example a wholesome external influence,' and of both have this firm been liberal. . . .

[Wood began his worsted business in 1812]: "He began, at an early period, to grant ameliorations, and to adopt a course of liberality towards his workpeople, so that by the time he had been in business ten or twelve years, he had carried out an improved system. . . .

"... The extension of the factory system brought on a more glaring amount of suffering and injury to the children and young persons working therein, and, about the year 1830, the evil became so great that Mr. Wood felt impelled, by a sense of duty, to make efforts for their deliverance. No law then existed,

<sup>1!!</sup> Alfred's" History of the Factory Movement, 1857, vol. ii. pp. 275-80.

in the woollen and worsted mills, to restrain millowners from enforcing lengthened hours of working, and some of them exacted from those juveniles of both sexes, 14, 16, and even 18 hours of daily toil, the year round! Although Mr. Wood never worked his mill so long as any of the hours, per day, above mentioned, he felt that even from 12 to 13 hours a day were far too protracted for human endurance; he determined to adopt a plan whereby 10 hours working per day was the rule for the younger, and 11 hours for the elder, branches of those employed at his works; he also then established a school on the premises with a master and mistress, the latter to instruct the girls in needle-work. When the parents did not furnish their children with materials for sewing, calico and other cloth were provided by Mr. Wood, and the articles, made up by the children, were sold to the parents at the cost of the cloth. In these arrangements Mr. Wood was greatly assisted by the Rev. George Stringer Bull, then incumbent of Bierley, near Bradford, whose zeal and success, in promoting the education and physical improvement of the poor, have been surpassed by none.

"Mr. Wood not only deemed it right to place his own workpeople in an improved position, but also to engage in arduous efforts to obtain parliamentary powers for enforcing proper hours and other regulations upon the whole factory system of the United Kingdom. He opened his mind and heart—as has been previously related—to his friend Mr. Richard

Oastler. ...

"From 1832 to 1847... no more than 11 hours a day were worked, and the reason why 10 hours was not the restriction arose from the fact that the sacrifice [?] annually made by working 11 hours, instead of those longer hours practised by their competitors, was as large as could be prudently made. . . .

"We have heard Mr. Oastler narrate how he and

Mr. Wood have stood on the steps of the counting-house facing the mill-yard, and watched the hungry children rush into their previously prepared and well-arranged dining-room (a luxury known then to few factory children). They had watched the children's return, after dinner, in groups of twos, threes, fours, and fives in animated conversation. Some running and romping, others shouting and singing, until suddenly, in joyous expectation of the 'better time a-coming,' they would unite in their chorus: 'We will have the Ten Hours Bill, that we will, that we will.'

"There was then in Mr. Wood's face an expression of satisfaction and enjoyment, which 'stores of gold' could not have awarded. Mr. Wood embarked in the Ten Hours Bill movement under a strong sense of religious duty; over him, neither commercial, personal, nor political influences had any longer control. He knew that he was rich, but his enjoyment of wealth was tainted by the impression that many had endured grievous wrongs during its acquisition, and he most heroically resolved that, come what might, all factory children should for the future be protected by the law; for the attainment of that end he was prepared to make every sacrifice. Though a man of most retiring habits, when the factory children required his presence, he was in the busiest of the throng. Public speaking was to him abhorrent; when his voice could serve the cause, no matter how numerous the assembly, that voice was heard. Disputes in newspapers were obnoxious to his habits, but when a mill-owner's opinion was required, in defence of the interests of factory children, his pen was used in their service. . . . When the Ten Hours Bill was before Parliament, Mr. Wood was in London, advising and instructing members of both Houses on the merits of the question. It was his habit to attend, when asked, all the more important of the committee meetings in Yorkshire and Lancashire. . . . With a generous heart, and a liberal hand, he opened widely his well-filled purse, and made its contents tributary in every place to the requirements of the factory movement.

"... We have trustworthy authority for asserting that, uniting the sacrifices consequent on the practice of working shorter hours than other capitalists in the neighbourhood, to the actual money spent by him in the furtherance of the Ten Hours Bill movement in connection with the firm of Wood and Walker, and Walkers and Co., the total would amount to 50,000l."

He retired from business and became a country squire. He refused all invitations to become a member

of Parliament. He "courted privacy".

Grant (History of Factory Legislation, p. 111 and elsewhere) supports these statements: "Of those not in the House, it is but a well-merited compliment to Mr. John Wood to say that never did man manifest greater interest in any cause: day after day, week after week did he spend in London, advising with, and cheering to increased energy, not only the parliamentary advocates of the measure, but the operative delegates in London, rendering pecuniary and other aid to all who were engaged in the struggle. The factory workers owe that gentleman a.debt of gratitude which they can only pay by their prayers for his present and future happiness. Mr. William Walker was also constantly in attendance and with almost herculean strength devoted day, and often night after night, to that cause which, of all other human things, was most dear to his heart."

# (b) JOHN FIELDEN

"Honest John Fielden," "the Self-Acting Mule," did not shine as an orator. "Neither his

<sup>&</sup>lt;sup>1</sup> Vide W. Cooke Taylor, Life and Times of Sir R. Peel, vol. i. p. 104.

elaborate industrial statistics non the minute details of his descriptions of distress in the manufacturing districts were appreciated by the House." But his "industrial position and early personal experience of factory labour gave great value to his parliamentary support (of the Ten Hours Bill). He indeed went further than his conservative allies, and demanded an eight hours bill in the interests both of masters and men." 1

Speaking of Fielden's Curse of the Factory System (1836), the Quarterly Review 2 said: "Its general merits would demand attention, but the name and circumstances of the author heighten its value: he is a gentleman of vast practical knowledge in every stage and department of the business; he has carried on for many years the trade of a manufacturer, and that on no contracted scale; for we speak from authority when we say that the firm in which he is a partner works up nearly one-hundredth part of all the cotton-wool imported into this country. . . . This, at least, affords a presumption that his advice is tempered by just views of interest, and that he cannot be rushing, with the temerity of a pauper, into every proposition of enthusiasts or coxcombs."

R. H. Greg, also a master manufacturer, says:3 "The authority of Mr. John Fielden has had great weight with the public. He is himself a very large manufacturer, and worked in a mill when a boy, and he is a zealous advocate of the 'Ten Hours Bill.' Mr. Fielden's opinions, however, must only go for what they are worth, those of an individual, of an individual, too, holding, what the public generally will conceive to be, not only extremely erroneous, but violent opinions on the New Poor Law. The soundness of his judgment may still further be impeached,

Vide Dictionary of National Biography.
 Article VII., Dec. 1836, p. 399.
 The Factory Question, 1837, p. 68.

as the advocate for a legislative interference with wages, and the establishment of a board for the regulation of them, for which, we believe, he prepared a bill, if he did not actually bring it into Parliament. A person who advocates an Act of Parliament for the regulation of wages, and who does so on such grounds . . . can scarcely have heard of the name of Adam Smith."

Samuel Kydd wrote of Fielden: "He had worked as factory operative in his father's mill, and, therefore, in a limited degree, knew from personal trials the sufferings endured by others. . . . He felt he was the trustee of the interests of those he employed, and was unceasingly watchful for their welfare. This twofold knowledge of workman and manufacturer enabled its possessor to judge of the feelings of employers and employed. Every important act in the life of the late Mr. Fielden was settled in the region of the understanding . . . few men had less of show. . . . From details he ascended to principles, and was, in consequence of sincere convictions, a strenuous advocate for shortening the hours of labour in factories, a measure alike favourable, in his judgment, to the interests of the employers and the employed. Mr. Fielden contended that a reduction of the working hours in factories was an indispensable condition of the future success of the cotton trade." He "contended that . . . 'the masters and workmen, by cultivating a good understanding with each other, and by union of effort, ought to do it for themselves, without seeking for legislative interference on the subject'; . . . but 'that what society ought to do and failed in doing, it was the duty of government to realise if possible by law.' He did not allow his regard for voluntary action to neutralise his legislative efforts."

Fielden took to himself the sins of mill-owners,

"Alfred," vol. i. pp. 325-31.

especially re the cholera panic of 1832. "We found hunger, nakedness, . . ." he said. "What of that? Neither of these was catching. Ah! but pestilence was!" In point of fact, among his workpeople he himself was "sympathising, friendly, and easy of access to all who had grievances or remonstrances to communicate." 2

## (c) JOHN EDWARDS, OF HALIFAX

"The firm of John Edwards and Sons, of Halifax, set the country the spirited example of working a large factory 10 hours a day. The Edwardses of Halifax had been long conspicuous for their support of the Ten Hours Bill movement. Mr. Henry Edwards (better known as Major Edwards, and who, from 1847 to 1852, represented Halifax in the House of Commons) had often contributed most generously towards the funds of the short-time committee of his own district, and had perseveringly advocated regulation by law. This union of precept and example was most important . . . [and] contributed very powerfully to check the force of long-cherished adverse opinion." 3

# '(d) JOHN RAWSON, JOSEPH BROTHERTON, JOHN BROOKE, THOMAS COOK, ETC.

John Rawson, of Bradford, who, having been a factory operative, became a master manufacturer, was chairman of a Short Time Committee.4

Of Joseph Brotherton, M.P., the Quarterly Review says he "began the world as a factory child, and has been ever since an able and zealous advocate for a limitation of Labour." 5

<sup>&</sup>lt;sup>1</sup> The Curse of the Factory System, 1836, p. 38.

 <sup>&</sup>quot;Alfred," vol. i. p. 326.
 "Alfred," vol. ii. p. 247.
 Vide "Alfred," vol. ii. pp. 288-92.

<sup>&</sup>lt;sup>6</sup> Article VII., Dec. 1836, p. 434, note.

Samuel Kydd makes special mention amongst others of John Brooke, of John Brooke and Sons, Armitage Bridge, and Thomas Cook, of Hagues, Cook, and Wormald, Dewsbury. Grant mentions that John Leech of Huddersfield "lent his valuable aid," and that William R(h) and of Bradford, J. R. Kay of Bury, William Kenworthy of Blackburn, "and some other large and influential manufacturers, did, by their presence in London and on deputations to the home secretary and prime minister, give importance to the cause." <sup>2</sup>

Of Robert Gardner, Philip Grant (who spells the name "Gardiner") says: "These, and many other illustrations in favour of shorter hours, were carefully collected (1845) to meet any further arguments that might be brought forward on the ground of injury to capital." 3

## (e) W. R. GREG

Several of the Greg family figure in the history of factory legislation, but apparently the only one to advocate the Ten Hours Bill was William Rathbone Greg (b. 1809), who, when about twenty-two years of age, after some two years as manager of one of his father's mills, published a pamphlet giving a "detailed, graphic, faithful, but deplorable account of the condition of the population of Manchester and district." 4

This pamphlet (which is not to be found in the British Museum) was, according to the eldest brother, Robert Hyde Greg (b. 1795), "freely drawn upon for evidence against the 'Factory System.'" Robert Greg admits that, "being a mill-owner himself, he, like Mr. Fielden, speaks with a kind of authority," but

<sup>&</sup>lt;sup>1</sup> " Alfred," vol. ii. p. 292.

<sup>&</sup>lt;sup>2</sup> Philip Grant, History of Factory Legislation, 1866, p. 111. <sup>3</sup> Ibid., 1866, pp. 116-7. For a detailed description of Robert Gardner's experiment, vide Appendix II. <sup>4</sup> "Alfred," vol. i. p. 260.

affirms "that the pamphlet of Mr! William Greg was little more than a college thesis written before he had any experience, and scarcely any acquaintance with factories, or factory population. . . . His only experience, if a trifling acquaintance deserves the name, was with concerns in which he had just become or was going to become a partner." The fact that his partners contradicted him before the Factory Commissioners was deemed by Robert Greg sufficient refutation.

The family seems to have determined to forgive and forget his pamphlet. It is noteworthy that William Greg was, with his brother Samuel, a failure as a cotton manufacturer. He "was very efficient in the general administration of the mill-prompt and resolute—but he did not take that pleasure in making money, which many men have. . . . It was difficult for him, with his antecedents, to believe that the capitalist could ever wield his power otherwise than honourably and with due consideration for his workpeople. . . . His relations with his workpeople were always interesting to him, and were of the most friendly nature. He was very popular among them, and when, at the time of the disturbances, the mob threatened to attack his mill, they all came forward to defend it." 2

His brother, Robert Greg, strenuously opposed factory legislation; yet he was so excellent a master that Lord Shaftesbury suggested his elevation to the peerage.<sup>3</sup>

Lord Shaftesbury's Life, 1892, vol. ii. p. 302.

<sup>&</sup>lt;sup>1</sup> R. H. Greg, The Factory Question, 1837, p. 69.

Memoir, in W. R. Greg's Enigmas of Life, 1891 edition, pp. xxvii, xxxviii.

## APPENDIX II

## EMPLOYERS' EXPERIMENTS IN REDUCTION OF HOURS

THE following experiments in the reduction of hours are described by Horner in his Report, May 16, 1845.

pp. 19-22 (Reports, vol. xxv., 1845):

"An experiment which has been made at a Factory in Preston, of reducing the hours of work from 12 to 11, has recently excited a good deal of public attention in this district.

[It was undertaken by Mr. Robert Gardner occupier of a Cotton Spinning and Weaving Factory employing 668 hands and considered a large establish-

ment.

"The reduction from 12 to 11 hours began on the 20th of April 1844, and has continued ever since The declaration made is, that the same quantity of produce, and at the same cost, has been obtained by the master; and that all the workers, day hands as well as those who are paid by piece-work, earn the same amount of wages in the 11 hours as was done before by the labour of 12 hours.

"I reasoned thus,—if the experiment is good for anything, it ought to prove that the result above mentioned was obtained, the speed of the machinery the quality of the raw material, the nature of the machinery and of the article manufactured, remaining unaltered from what it was before. Now, as the quantity produced must, in the main, be regulated by the speed of the machinery, it must be the interest of the mill-owner to drive it at 'the utmost rate of

speed consistent with the following conditions, viz., the preservation of the machinery from too rapid deterioration; the preservation of the quality of the article manufactured; and the capability of the workman to follow the motion without a greater exertion

than he can sustain for a constancy.

"One of the most important problems, therefore, which the owner of a factory has to solve is, to find out the maximum speed at which he can run, with a due regard to the above conditions. It frequently happens that he finds he has gone too fast, that breakages and bad work more than counterbalance the increased speed, and that he is obliged to slacken his pace. I therefore concluded, that as an active and intelligent mill-owner would find out the safe maximum, it would not be possible to produce as much in 11 hours as in 12. I further assumed that the operative, paid by piece-work, would exert himself to the utmost, consistent with the power of continuing at the same rate; and that, therefore, he could not, permanently, produce as much in II as in I2 hours. Thus I inferred, that any abridgment of the hours of labour must necessarily be accompanied by a reduction in the produce, in a well-regulated factory.

"I saw both managers, and they not only answered every question and every objection I made, most openly, but offered to lay their books of produce and wages before me. They unequivocally stated that their produce had been the same since they worked the

shorter hours.

Wages-	Average per week.			
• Spinners Weavers	January 6 to April 20, 1844 (12 hours). . 38/1 . 10/1½	April 20 to June 29, 1844 (11 hours). 38/11/2 10/31/2		
Machinery	Spinning—Speed Carding Engines Weaving—No ir	l increase 2 %. —somewhat more		

"The produce of the carding engines is dependent upon the speed of the machines, and scarcely at all

upon the persons who attend them.

"Facts being thus opposed to my preconceived theory, and they did not deny the correctness of that theory, so far as it went, I asked them how they accounted for the result that had been obtained. The explanation they gave showed that I had left out an important element, viz., the extent to which vigilance and attention on the part of the workman can influence the amount of production.

"They stated that, by greater assiduity on the part of the workpeople while they are at their work, by coming in punctually at the stated times, and by avoiding needless wastes of time throughout the day,

the object was accomplished.

"I afterwards saw 16 of the workpeople, some spinners, and some weavers, who came to me at my inn, and they confirmed all I had heard from the managers. They enumerated the many advantages and enjoyments they derived from stopping an hour sooner at night; and among others, they stated, that whereas, while they were working 12 hours, only 27 people in the mill attended the night school, there are now 96. . . .

"Mr. Gardner . . . expressed his continued conviction that the experiment was fairly made, and that

the result has been perfectly satisfactory.

"The statement that 'they had been keeping more steadily to the same kind of work' was denied.

"The experiment was copied by Messrs. Horrocks and Jacson.

"Horrocks and Jacson's used to work from 1 till

7.30 p.m.

"Mr. Jacson senior told the workers 'he would stop half an hour at 4 o'clock for tea; and, if they kept up their former produce, that he would not add

<sup>1</sup> It is Horner, the education enthusiast, who writes.

that half hour to the working day. [He worked 11] hours instead of 12. This arrangement began on October 1, 1844; on March 31, 1845, it was found

that the full amount had been kept up.]

"Finding the result so favourable, the masters resolved to try whether they could go to 11 hours. They began on the 1st of April . . . had not found any diminution in quantity; but they were at the same time satisfied that they were then at the utmost limit of reduction of hours, consistent with keeping

up quantity.

"There was one uniform statement by all, that the quantity had been kept up, and without any extraordinary exertion; and they all agreed in the cause, viz., that there was a greater economy of time while they were at their work; the spinners said, 'We work with more spirit, we have the reward ever before us of getting away sooner at night, and one active and cheerful spirit pervades the whole mill, from the youngest piecer to the oldest hand, and we can greatly help each other.'...

"When they work 11 hours the division is made

thus— $5\frac{1}{2}$  to  $8\frac{1}{2}$ , 9 to 1, 2 to 6.1

"The success of the experiments must be considered to be unrefuted, until they are disproved by something

more conclusive than a priori reasoning. . . .

"Although the experiments of Mr. Gardner and Messrs. Horrocks and Jacson may have been successful to the fullest extent stated, and form a good ground for experiments being tried in other mills of the same description, they do not, in my mind, form any ground to justify a further legislative restriction of the hours of labour in factories. . . . In a very large proportion of the factories of the United Kingdom, a reduction of hours must of necessity cause a reduction of the quantity produced. . . . I could go into such details as would prove this. . . .

Four hours' spell.

"As the whole question rests upon the assertion that the master gets the same amount of produce, and some advantages beside, and the workman the same amount of wages, there is no necessity for legislative compulsion; the asking for it would be an admission that there are cases where it would be to the disadvantage of the master to work the shorter period; if the interests of the master and workmen go together there is no occasion for a law, the matter can be best settled between them. A mutual arrangement brought about by a common interest is also likely to promote a better understanding between the employer and the employed; and there is this further advantage, that if, by any circumstances, and these perhaps of a temporary nature, the produce and the wages should not be kept up, there is a margin to fall back upon."

Robert Gardner himself describes his experiment in a letter to Horner, dated April 22, 1845 (pp. 26-7):

"So fully satisfied am I on this point, that if it should please God to spare my life to the season of the present year when we light up again, it is my present intention to make a further reduction of time to 10½ hours, without the slightest fear of suffering loss by it. I find the hands work with greater energy and spirit; they are more cheerful, and apparently more happy. All the arguments I have heard in favour of long time appear based on arithmetical question—if I produce so much, what will 12, 13, or even 15 hours produce? This is correct as far as the steam engine is concerned; whatever it will produce in 11 hours, it will produce double the quantity in 22. But try this on the animal horse, and you will soon find he cannot compete with the engine, as he requires both time to rest and feed.

"My much respected manager and friend, Mr. Heaton, tells me he has passed all the grades of a mill, and has worked 11, 12, 13, and even 14 hours per day,

and was daily exhausted, but he says they knew their hours, and worked accordingly—that he would have done more and better work in less time. It is, I believe, a fact not questioned, that there is more bad work made the last one to two hours of the day than the whole of the first nine or ten hours. There can be no doubt but 11 hours are quite sufficient for anyone to exhaust the whole of his or her strength in any one occupation, situation, or atmosphere, although the work is not laborious.

"It can be no small gratification to any employer of a large number of hands to see them healthy and happy, with an opportunity of improving their minds. I am satisfied those mills that work short hours will have a choice of hands, and then individual interest will accomplish what is necessary, without the intervention of the Legislature.

"I beg to state that about 20 years ago . . . in our Manchester warehouse . . . to increase the quantity of the work, I requested they would work (instead of II) 12 hours. At the end of the week I found they had got a mere trifle more work done, but, supposing there was some incidental cause for this, I requested they would work 13 hours the following week, at the end of which they had produced less instead of more work. The overlooker told me the hours were too long, and invited me to be in the room with them the last hour of the day. I saw they were exhausted, drowsy, and making bad work and little of it; 'I therefore reduced their time two hours, as before. Since that time I have been an advocate for shorter hours of labour."

## APPENDIX III

EXTRACTS FROM INSPECTORS' REPORTS RE EMPLOYERS'
INTEREST IN THE WELFARE OF THEIR WORKPEOPLE

(a) From the Report of R. J., Saunders, Feb. 15, 1836 (Reports, vol. ix., 1836, p. 166)

"Those who have had favourable opportunities of witnessing and examining the interior economy of mills and factories under various circumstances, can understand from whence have arisen the very opposite opinion and statements that have been published as to the effect of that description of labour on persons employed therein. I can conceive no one general system that can admit of greater diversity of situation for the operative of every age.

"There are not wanting abundant proofs that it is in the power of the occupier of every mill and factory to adopt regulations which will ensure to all employed under him, a degree of comfort and advantage, greater in my opinion than is ordinarily enjoyed by any others of the same class in society. . . .

"No law can secure to all classes the advantages derived from the superintending influence of a truly benevolent master or resident manager; but I consider its effect might eventually be more extensively felt, if some discretionary power was granted, admitting a modification of the general rules and regulations in favour of mills, wherein the health and the moral and religious education and improvement of all

classes were consulted with zeal and perseverance by

the occupiers.

"I continue to receive from some of the manufacturers who have adopted any improved plan of education for the younger class, gratifying assurances that the improvement effected is evident and considerable. . . .

"The advantage invariably resulting to the millowners themselves, from diligent and persevering exertions in upholding a system of high moral feeling and regular conduct among the workpeople, ought to be sufficient to induce others to adopt similar plans, but experience proves great difficulty to exist in persuading persons to change their ordinary habits, especially when the least additional trouble or expense is to be first incurred for a prospective advantage, the value of which they cannot fully and correctly estimate.

"While this difficulty requires that a law to ensure reasonable protection to the young, and comfort and security to all, should be strong and firmly enforced, [it] also makes it very desirable that every encouragement be offered to the exercise of humane and charitable feelings."

# (b) From the Report of Leonard Horner, Jan. 18, 1837 (Reports, vol. xxxi., 1837, p. 40)

"The hostility to the Act, to which I have alluded, and which has in many instances considerably impeded its operation hitherto, was evidently created, not so much by the interference itself, as by indignant feelings in the minds of many of the most extensive and respectable mill-owners arising from the great injustice with which they have been treated in the various discussions and publications to which the factory question has given rise; where accusations of the most discreditable conduct and motives have been unsparingly brought forward against mill-

owners, as a body, without distinction. That there were some whose conduct had been such as to merit the terms of reprobation employed was unfortunately too clearly proved by the evidence laid before Parliament; and that there are still many who appear to be indifferent either to the health or moral state of the children they employ, and to view them in no other light than as tools let out to hire, is too clearly proved by the prosecutions which have taken place in my district in the last half-year, and by the little disposition evinced by them to forward the humane objects of the Act by a small sacrifice of trouble and expense. But, that instances of cruelty and. oppression are common, of occur in a greater proportion among mill-owners than other classes, or that there is among them a smaller proportion of benevolent good men, may be most confidently denied. Indeed, I know of no description of persons of whom so many instances may be brought forward of active benevolent exertions and large pecuniary sacrifices to promote the welfare of the people they employ. To this I bear the most willing testimony from very ample opportunities of observation."

(c) Extracts from Leonard Horner's description of a model factory in 1845 (Reports, vol. xx., 1846, pp. 573-7)

A heading in Horner's Report, Nov. 26, 1845, reads:

"PLAN'S FOR THE WELFARE OF THE WORKPEOPLE."

He says: "I have often heard some of those best acquainted with the humbler classes in the manufacturing districts lament that a better understanding between masters and their workpeople does not more generally prevail; that masters do not give more time and bestow more pains to become personally

acquainted with the individuals whom they collect together, and by treating them more as fellow-men, having a common interest with themselves, and aiding them by friendly advice, lessen the difficulties and alleviate the privations that are inseparable from the condition of those who live by daily labour. I am aware of many exceptions to this state of indifference among the occupiers of factories in my district, and I had the satisfaction of making them known in former Reports. . . . The Inspectors have it in their power to do much good, by availing themselves of the opportunities they possess of making known, in other parts of their districts, plans for improving the comfort and condition of the workpeople, which they have seen carried successfully into operation; for I am fully persuaded that many masters would gladly promote the welfare of their people, if they knew of any practical mode of doing so. It is very natural for them to view with incredulity the practicability of plans suggested by mere good intentions, without being supported by examples; but they will take a different view when an instance can be produced of the successful working of arrangements in an establishment similarly circumstanced as their own. I will, therefore, now give an example of what has been done."

To the Managing Director's "personal influence, enlightened views, and unwearied zeal, much of the success of their plans is to be ascribed. I asked Mr. N. for the particulars I am now about to narrate, for the purpose of making them public, and it was not until after much solicitation that I could obtain his consent to my doing so." His only objection was to the publication of names. He said, "I confess I think it should not be needful to make such proceedings public; if those interested in such establishments were but aware how much exquisite gratification to themselves is derivable from the performance of

their duty to their workpeople, they would not need any urging from without.' However, when I represented that the example would lose more than half its value in the eyes of those I wished to profit by it, unless I could name the factory, he yielded to my solicitations."

#### N.S.M. COMPANY. 1845

854 hands; 68 children, 378 young persons

#### ARRANGEMENTS:

#### I. Health.

Surgery on premises; surgeon at factory daily (12-1); surgeon visits homes, and gives medicines; salary, £200 per annum.

Hands receiving more than 4s. per week contribute 1d. weekly.

Hospital tickets are available.

In eight months

634 surgery cases and 53 home cases were treated.

#### II. Education.

200 factory children and children of employees attend school daily.

Reading, writing, arithmetic, geography, history, and sewing are taught.

Attendance at night school (8-9 p.m.) is irregular. 40-50 names on books.

#### III. Religious Instruction.

School open 9-11 a.m. on Sundays.

300-330 scholars.

Two separate rooms for adults.

"The instruction is given by 70 teachers, all volunteers from among the overlookers and others employed in the mill." Some attend weekly, others fortnightly, one of the proprietors, the manager, and bookkeeper, acting as superintendents and secretary."

Spelling, reading, and Church Catechism are taught. Church service between 11.15 and 12.30, in schoolroom; 300-400 persons.

Attendance at Sunday school compulsory only on short-timers. The Directors, three in number, are respectively

(1) Church of England,
 (2) Unitarian,
 (3) Wesleyan Methodist;

while many of the workers are Roman Catholic; " all acting together in one Christian spirit."

```
IV. Lending Library, yet in its infancy.
         (300 volumes.)
       Horner gives the Catalogue.
         It includes
           Novels.
           Biographies,
           Books on
             History
             Natural history.
             Sacred history,
             Religious subjects,
             Arts and sciences,
             Geography,
             Voyages and Travels;
           Tracts (the Spectator among them);
           Journals, Magazines, etc.
       Additions are made at Christmas.
```

V. Brass Band.

24 Performers.

Instructor "paid principally by the pupils themselves."

VI. Savings Bank.

Open every Saturday to receive sums of 6d. to 5s.; 5 per cent. interest is allowed "on undisturbed accumulations of six months."

VII. All fines go to Sick Relief Fund.

VIII. Festive Meetings

1. All who "give satisfactory proof of being in the habit of attending some place of instruction, or of public worship on the Sunday" receive a free ticket

for the annual picnic. The party numbers 600-700.

New Year's Day—"Teachers and singers and members of the band are invited by the proprietors to a supper in the schoolroom"; a concert and speeches follow.

IX. Fire Escape (described in detail), and Fire Brigade, with monthly practices.

"The example of the N.S.M. Co.," says Horner, "is greatly increased in value by the circumstance of their factory being in a large town."

# (d) From the Report of Leonard Horner, 1848 (Reports, vol. xxii., 1849, p. 151)

"The instance I have now to give is one of especial value, because it shows what may be done in the heart of a large town. It has often been observed to me while talking with mill-owners on this subject, 'These things are all very good, and may be accomplished in country situations; but what can be done in such a town as Manchester?' Messrs. M. of . . . New Mills in . . . Street have answered that question. This communication has greater weight, inasmuch as both gentlemen have themselves been factory operatives." Mr. M. wrote that they decided that "the use of intoxicating drinks was the first great cause of their [the workers'] ignorance and misery"; so they called together the most intelligent workers, who formed a committee of fifteen. Three hundred out of five hundred (and both employers) became tectotallers.

"We now set about improving their physical condition, by introducing a system of complete ventilation in the various rooms of the works. . . . We fitted up about 1500 ventilators of various kinds, suited to the different processes of spinning and weaving, one card-room alone costing upwards of £100, but the health and activity of the workers were so much improved that we felt ourselves amply repaid for the outlay. One case of improved health may serve as an illustration of the value of this much neglected sanitary portion of a factory." (A woman of forty, who suffered from asthma, spent 1s. per week "on a bottle of physic," as she said, "to enable her to breathe." This became unnecessary after the

installation of ventilators.)

"We next turned our attention to open-air exercises," and formed an extensive gymnasium and playground, running parallel with the large mill, and to connect this land and the mill-yard we con-

¹ From the notice issued by the Committee: "Although there is no doubt that the working classes suffer much from bad laws, low wages, and other causes, yet we are deeply convinced that they have in their own hands the power of making one change." Then follow suggestions re abstaining from alcoholic drink. •

structed a six-feet wide promenade on the margin of the river. . . . On the playground we placed a giant-stride and swings for the juveniles, skipping ropes, etc., for the girls, leaping-bars and skittles for the adults, and cleared a space of ground for the boys to play at marbles, etc., and the girls at merry-go-round and other girlish games. The whole of the land we surrounded with strong seats, so that all might enjoy their meals in the open air, or rest awhile from their sports, and it is no unusual thing to see on a fine summer's morn from 50 to 100 thus enjoying

and invigorating themselves.

"Having thus far succeeded in improving the physical condition of our people, both in the mill and out of it, by means of ventilation, open-air exercise, pure drinking water (having put up a large filter for this purpose), and many other little matters, we thought ourselves in a fair position to commence the more important work of improving the moral and mental condition of our workers. With this end in view, you may remember that I consulted you in 1845 as to the best means of carrying our object into practical effect, when you were kind enough to give us much encouragement and the benefit of your great personal experience. We at once commenced operations, and so far we have not had a single reason to induce us to regret the steps we have taken."

Vide also Manchester Guardian, Nov. 15, 1848 (p. 5), for an account of their Mutual Improvement Society:

# C.N. Mills. Mutual Improvement Society

There were-

I teacher paid by the firm,

I teacher paid by subscribed fund, and 3 teachers unpaid—the latter being "young men employed by the firm,"

Attendance averaged 60 to 70.

Library—600 volumes—1d. per week subscription. News Room and Library 1d. per week.

- Managed by a Committee of thirteen, chosen every six months.

  President, Secretary, and teachers are employees in the mill.
- There was also a Co-operative Association. Tea and coffee were bought wholesale: "3 of the discount they obtain (121 per cent.) is so much saved to the hands; the other third goes to the Society."

The Savings Bank was of but twelve weeks' standing; £71 stood to the credit of the members. . . .

"Mr. M... referring to the Society... said he believed that instead of doing harm, as they had been told it would do, by raising up a spirit of insubordination amongst their workpeople, he could say honestly that he believed there was not a better set of workpeople in any other mill; a more sober set he could say there was not... Out of 500 hands, there were 300 who had signed the pledge, and of the 15 overlookers, 13 were pledged abstainers."

## "GOOD EMPLOYERS"

In raising the standard of industrial conditions, the influence of the good employer is undoubtedly of great importance. But to determine in any individual case whether an employer may justly be deemed "good" is a matter of considerable difficulty. No more reliable opinion can be obtained than that of expert factory inspectors; yet even they may be mistaken. Experience has made them cautious, and they now hesitate to praise what appears good, lest it prove but a cloak for evil. The general public is apt to suspect the motives of an employer who makes any unusual arrangements for his workpeople's comfort or By the standard which he himself sets convenience. up, an employer is popularly judged. Any attempt on his part to improve conditions in one respect renders him liable to be adversely criticised in all other respects, even though in these he differ not at all from his fellows. Occasionally such criticism has given rise to libel actions, but commonly matters do not proceed so far. There is an undertone of dissatisfaction; and though the actual cause is the low level of average conditions, the immediate cause appears to be the raising of the level in one respect by an individual employer.

It is usual for factory inspectors now to decline all personal hospitality on the part of employers, but a display of excellent conditions is a much more subtle

<sup>&</sup>lt;sup>1</sup> Compare Reports, vol. xxv., 1845, p. 54.

bait, and when an inspector has been duly impressed by the general excellence of a factory it is difficult to condemn some seemingly insignificant breach of the law. Doubtless it is true that those firms whose working conditions are generally excellent are likely to be glad to rectify any defect; but it is not safe to rely on this probability, and so factory inspectors hesitate to express their approbation as cordially as they otherwise would.

That an employer, good in some respects, may in others fall short even of the minimum requirements of the law is shown by the following quotations:

(a) Horner, in a letter to N. W. Senior, Leeds, on May 23, 1837, said: Some employers, "able, good, and benevolent men... have done much to improve the moral condition and add to the comforts of their workpeople... Some of them, at least, I know to be men of a warm temperament and of a proud spirit, who wish to have their own way of doing good, and who kick against any attempt to force them to do good in any other way."

He points out that the Courts have fined men "of whose benevolent exertions for their people I have spoken to you and others with the highest praise."

(b) James M'Nish, "a witness entitled to the utmost credit, even by the admission of the Commissioners," was a worker who suffered considerably on account of the outspoken way in which he attacked the evils of the factory system. No one would employ him; and when he set up a shop, no worker dared deal with him, for to be seen going into his store was to become a marked man. M'Nish certainly did not beat about the bush in his letters, one of which Inspector James Stuart has handed down to us in all the pathos of its original orthography. One

<sup>&</sup>lt;sup>1</sup> Quarterly Review, Dec. 1836, p. 437.

ther wonders at Stuart's temerity in preserving such document with its forceful indictment against imself. In this letter, dated October 22, 1838, I'Nish said:

"I am aware that I told you in the casual inversation, that I had the information resecting Deanston, from the Parantes of the hildren . . . the workers dare not be seen speaking me. . . .

"I recolect having stated to you in our casual onversation, that there were children were children nder 13 working 12 hours per day in the Deanston actory you found that to be groundles, I wish to now what Plan you adopted to find out whether it as groundless or not, or if you had not Dined with Ir. Smith, and Pertook of a bottle or two of his Wine, efore you attempted to find out, whither my infornation was groundless or not,—Smith is welcome to ie high Elogy you pass upon him, I have no doubt e entertains a very high opinion of you also, but I ave been informed he is one of the greatest Tyrants. nat any workman ever had the misfarten to be under, ne single fact is enough to refute all your assertions, iz. Smith is paying his workers full 30 per cent. lower ages, then any other Mill-owner in Glasgow, I elieve I may add in the country so much for the abstantial Comferts he is Deffusing." 1

(c) Inspector R. J. Saunders, writing of certain otton manufacturers in Leicester, in 1851, said:

"The general mode in which the business of this actory has been carried on in all that respects the ealth and comfort of the persons employed, has at all imes given me much satisfaction, and I have noticed avourably in former Reports some of the regulations dopted by this firm for securing to their workpeople dvantages for which the Factory Act contains no

<sup>&</sup>lt;sup>1</sup> Reports, vol. xix., 1839, p. 526.

provision." Moreover, the hours were shorter than those commonly worked. .

The firm was on three counts charged with having infringed the Factory Law. The defence was that it was "not a factory," as only cotton winding was carried on there; and the case was dismissed.

Subsequently the same firm was charged on another count, and again the case was dismissed.

(d) Writing in 1854, Inspector Howell said:

"In the County Tyrone . . . is a flax factory of conspicuous pretensions, and distinguished by the Scriptural designation of 'Sion,'—with day and Sunday schools,—musical instruments,—two libraries,—one containing 500 well selected volumes,—enjoying, in fact, all the educational appliances which characterise what are commonly called 'the Show Mills' in the cotton districts of England."

A boy was injured by an unfenced shaft in the factory; the occupiers were convicted and appealed against the verdict. The conviction was quashed on a technical point, and the affair is said to have been "marked by unusual and discreditable incidents." 1

<sup>1</sup> Reports, vol. xv., 1854-55, p. 301, etc.

### APPENDIX V

Description of Work undertaken by one Company, prior to 1852, for the Benefit of their Workpeople: the Appointment of a Factory Chaplain

# (From the "Quarterly Review," Article I., Dec. 1852)

"HAVING in past times looked upon mechanics as no better than live machinery, and now, after the horrors of Factory Reports, having subjected ourselves to Factory legislation, we are in danger of a re-action that will carry us into the profitless extreme of plausible impracticabilities."

So the writer read with pleasure the "Special Report by the Directors to the Proprietors of . . .

Company."

The Managing Director, Mr. James Wilson, "thought it possible, without loss or hurt to the texture... to humanise and Christianise 'the hands'....

"The first step in the movement began among the young. . . . This movement was quickly and warmly encouraged by him; nay more—we have reason to believe that he had paved the way for it by many quiet and unpretending measures—above all, by so exercising his patronage in the distribution of superior posts as to impress every observant member of the community with the importance of some educational acquirement. But he carefully avoided making himself prominent as the founder of a new system. He desired, if possible, to avail

himself of the voluntary action of the minds committed to his care. His great ambition was to form independent characters, in the good sense of the word, who might afterwards walk alone without

leading strings. . . .

"'The schools,' he says, 'began in a very humble way by half a dozen of our boys hiding themselves behind a bench two or three times a week, after they had done their day's work and had their tea, to practise writing on scraps of paper with worn-out pens, begged from the counting-house. The foreman of their department encouraged them, and as they persevered and were joined by other boys, he begged that some rough moveable [sic] desks might be made for them. ... My brother encouraged them with some books as prizes. . . . The fact of the whole being the work of the boys themselves seemed to form so large a part of its value that we carefully abstained from interfering in it further than by these presents of books for prizes, and of copy-books, spelling-books, and Testaments, and by my being—(though not till long after the commencement, and after being much pressed, and being assured that it would cause no restraint)—always present at the school to give them the sanction of authority, but taking no more part than hearing the boys their spelling.'

"This was the secret," says the reviewer,—"this being 'always present'; this drudging on with dull boys at their spelling; this kindly sacrifice of leisure... this practical sympathy... toil and oversight,

as distinct from interference. . . .

"'Now, there was one part of the factory,' says Mr. Wilson, 'which we had long looked upon as very dangerous in case of a fire occurring. We gutted all this part . . . making in place of the two lower store-rooms one lofty school-room, big enough for about 100. It was in the winter of 1848 that the boys got into this first school-room, still working

entirely by themselves, so much so that the prayers with which the school closed, now that the separate rooms had set them free from the bustle of the factory, were always read by themselves.'

"After this, as older boys came in, it became necessary to have the school placed more under authority, though Mr. Wilson still guided rather than governed all. The new room began to be overcrowded . . . a second school-room was built, and, by and bye, the Company having taken the business of — [another factory], the school system, now including girls, required still further expansion. . . At an inspection which took place in 1851, when the schools were emptiest, 512 scholars were present; and in the winter, when business would be slack, Mr. Wilson was confident of numbering 800. . . .

"Mr. Wilson felt that he was requiring a good deal of those who had been hard at work all day, to spend a couple of hours at the evening school, with their 'spelling-books and their Testaments'... especially... youths whom penny theatres and all the low pleasures of low London life were beckoning away: he therefore set himself to smooth the trial.

""With this view,' he says, 'we repeatedly in the spring and summer of 1849, asked all the school to a tea-party in the new room. The first tea was an interesting one. . . . Those who came untidily or dirtily dressed to our first tea, feeling themselves out of keeping with the whole thing, tried hard to avoid this at the next party. . . . By the help of these teaparties we made the boys who did not belong to the school feel awkward and uncomfortable about not doing so; and very many joined—several, however, stipulating that they were not to be asked to the next tea, lest that should be supposed to be the motive for joining. . . .

"'In following up our plan of combining as much pleasure as possible with the schools, the next step was to teach the boys cricket:—yet it was anything but a pleasant occasion which decided the time for beginning this. In the summer of 1849 the cholera came . . . it was decided that fresh air and exercise out of the factory were the best preventives. We therefore closed the school entirely, and a gentleman (Mr. Symes) having most kindly let us take possession of a field which was waiting to be occcupied by a builder, we set to work hard at learning cricket after working hours. . . . The cholera seems an odd reason for taking to cricket, but I dare say the cricket had a very happy effect on the general health of our boys, and so may have strengthened them against catching it. We lost only one (an amiable and well-conducted boy of seventeen), although many lost relations living in the same houses with them. Always when the game was finished, they collected in the corner of the field, and took off their caps for a very short prayer for the safety from the cholera of themselves and their friends.' . . .

"In 1850 they played in the same field three nights a week, working in the school the other three nights. Bricks and mortar, however, soon drove them out of that field—and they got another of above six acres, the edges of which were allotted to gardens. Many now took to gardening—and, though perhaps they at first 'just barely knew which end of the spade went downwards,' the novel pursuit by degrees inspited in not a few 'feelings and tastes they had no idea of before, and of a nature to have a most softening influence upon them.' . . .

"The three nights when the boys were schooling, the men were got to play—and then at last boys and

men were brought together.

"'What gave the game the greatest start was, that some of the boys took it into their heads to send a challenge that twenty-two of them would stand the eleven of a cricket club, formed by a few of our men, who, having been cricketers before coming to the factory, had joined themselves together to keep up their practice of the game, as they best could, on Kennington Common or elsewhere. Some of this eleven . . . treated the challenge with great contempt, their captain saying he would play the twenty-two himself. . . . But the boys . . . to the great astonishment of themselves as well as of all the rest of the factory . . . beat the men in one innings.' . . .

"The grand difficulty in factory work and in all co-operative labour on a large scale is that people are together without knowing or caring for each other; it is community without communion, co-operation without concord; . . . as a living system, utterly fragmentary, disjointed, unsympathetic, cold, without any link whatever between part and part. We must get them away from the calico or the candles and bring them together in some unbusiness-like way, if we hope to give the business portion of their life a

proper tone. . . .

"Mr. Wilson's next movement was to have a 'day of it'... among the fine hills that overlook Guildford. Here they strolled about, played a cricket match. . . and in the middle of the day . . . in a small church . . . chanted their part of the service. It must have been a striking and touching scene—that first, we fancy—of the sort—the holiday workers of a London factory chanting the Psalms in the old Norman chapel. . . . Mr. Wilson had some doubt how far divine service would chime in with the other proceedings of the day; it answered perfectly. The country itself seems to have made its impression; 'it was,' as he says, 'so absolute a contrast in its quietness and extreme beauty to all the common life of these boys, that one felt what a world of new ideas and feelings they were being introduced to. From the wav they looked at and spoke of the country to each other when they were there, and spoke of it after returning, I am sure many of them, if they live till ninety, will remember that one day, and with a feeling more beneficial to their minds than any which months of ordinary schooling

would be likely to produce.'

"The next year an equally successful expedition was made to Herne Bay. This last season they received an invitation to Farnham Castle from the Bishop of Winchester, in whose diocese the factories are placed. . . . They were suffered to ramble at will over the stately old palace and its picturesque grounds; they were treated and trusted as friends, and they felt the treatment. No high-born company could have behaved more decorously than those five hundred artisans, young and old, thus let loose for a summer's day. . . .

"The cricket and the excursion, let us remember, were used as a sort of reward-tickets for those who had stuck well to the winter evening school, and the Manager is quite ready to defend his use of such

sugar-plums:-

"'When it is considered how very much you are asking of a boy . . . you will not be surprised that, while always holding out the improvement as the grand inducement to belong to the school, we are glad with the general run of them to avail ourselves of other inducements also. The matter might be settled very simply by authority:—but with boys beyond a certain age any such attendance as that would do them harm instead of good.' . . .

"Himself more and more occupied with the commercial business of the growing concern, Mr. Wilson felt it essential to have one who could give up his whole time and care to what he regarded as a still higher department of duty—and accordingly he added to his staff a clergyman of the Church, who seems to have entered on the work with the same

earnest spirit.

"'I look upon this appointment,' says the thoughtful and modest Manager, 'as the means of binding together and securing all the efforts for good that are being made in the factory, for there are many of us anxious to help forward all that is good, but we are all busy, and it seems much better that the originating and superintending of the educational arrangements should not be with any of us, but with some person with nothing else to attend to, and that we in our several positions in the factory should only have to back him up and assist him.' 1

"The . . . chaplain has no sinecure. quarter to six every morning he gives a short service for the men who are inclined to attend it before commencing work, and are there joined by men who have been working all the night—a sort of family worship on a large scale. . . . This occupies about twenty minutes, and then another short service is commenced for the boys. When this is over the chaplain attends in the [Factory] School till breakfasttime four days in the week; and the other two mornings he spends a similar space in the [second] Factory Morning School—being there occupied with a class of the most forward boys whom he desires to train as monitors for the evening school. After breakfast the brother managers, and their foremen . . . have a short service with the chaplain before the counting-house work commences. At five minutes to nine the day-school opens, and the chaplain visits and works in it. In the afternoon he visits the sick at their own houses, and thus becomes acquainted with the factory families. . . .

"'The six o'clock service for the men was begun . . . while the factory was still in the state of excitement attending the search during many days for the body of a youth drowned while on a boating

<sup>&</sup>lt;sup>1</sup> This is perhaps the carliest example of a full-time official appointed to superintend the welfare of the workers

excursion with four other employees. The countinghouse service . . . arose like the cricket, in the cholera. Seven of us had been in the habit of going to the early daily service at . . . Church, but when the cholera became very bad, as the way to and from the church was through a low part of . . ., in which it most raged, and passed through two church-yards in which cholera burials were going on at the rate of from forty to fifty a day, we got frightened, being all of us more or less unwell.'

"The engagement of a chaplain led naturally to the provision of a Chapel, with Sunday services....

"And how-many will ask-how did all this sort of operation affect the shareholders of the . . . Company? We gather that to this question a very satisfactory answer may be given. The good name of the Factory made it an object in the neighbourhood to get employment within it, and hence the managers had a choice of the labour in the market, the very games added to the skill and manual dexterity of the people; cricket exercised its influence" on the work; "the good cricketers acquired a fineness of hand which gave them increased facility in their work. But, moreover, the sympathy and confidence bestowed upon them inspired many a heart with an interest in the Factory distinct from and above what mere wages can create; and, above all, by degrees the Manager found himself in possession of a set of intelligent assistants, older or younger, on whom he could depend for a zealous participation in his views and plans towards the general amelioration of thoughts, sentiments, and habits. . . .

"'One can only generally say that the whole spirit of a Factory such as I trust ours is now in the prospect of becoming, will be different from one in which the giving and taking of wages is the only connection between the proprietors and their people. One feels intuitively . . . the difference does by

the very laws of human nature and religion ensure to the one much greater prosperity than to the other, although it may be impossible to trace out the details of this, and say such a hundred pounds spent upon the boys at such a time has brought back two hundred pounds before such a date afterwards. If I were forced to come to some particular proved instances of benefit to the business, I should take first . . . a number of boys working so steadily and well at what a few years ago we should not have thought of trusting to any but men. . . . Yet even here the exact pecuniary benefit cannot be stated, for the boys . . . are not substitutes for men but for machinery. It is the fact of our having at command cheap boylabour which we dare trust, that enables us to make now by hand the better sort of —— which we used to make, like the other sorts, in the machines, and which, on account of the hardness of the material, when so made were never free from imperfections. The benefit will come to us, not in saving of wages (for had the choice been only between the men's dear labour and the machines, we should have stuck to the machines), but in increased trade, through the imperfection... alluded to being removed.'...

"No less a sum than 32891. was spent. And this outlay, be it observed, came wholly from the pocket of the acting-manager, Mr. James Wilson, who had a salary of 10001. a year. The expense of his own experiment was wholly his own. The Company . . . . had no hand, until very recently, in the noble work set on foot within the walls. . . .

"The Directors began by nominating a Committee for full inquiry, and having received a Report warmly commending all that had been done, they called a meeting which opens out a new and noble scene in commercial life. The Directors now resolved with cordial unanimity to adopt the whole system introduced by Mr. Wilson, to reimburse him

the money which he had laid out without any thought or idea of repayment, and to take upon themselves for the future the charge of the various schemes at the cost of some 1200l. a year. . . .

"Mr. Conybeare (a member of the inquiring Committee), in proposing that 900l. a year should be expended on the schools, expressed himself as

follows :-

"'It seems to me as if by having done so I had already in some measure relieved myself of a burden which has long been weighing upon me. . . . Some eighteen months since a gentleman . . . mentioned those [schools] connected with our Factory as among the best managed in the neighbourhood, and spoke in terms of the highest commendation of our Company for the great attention we paid to the education and moral welfare of our workpeople. He said that our Company had achieved great success, but that we had deserved success. . . . Of course, I immediately disclaimed, on behalf of the Company, all credit for what was no work of ours. . . . Need I tell you that it pained me to make such an explanation, and that it was with feelings of shame that I admitted that as a Company we did not as yeperrorally merit the success we had attained? Speaking as a Director I would impress upon you my own firm conviction that the school system which we, as Directors, recommend is highly conducive to the pecuniary success of our business. The good effects of that system permeate and pervade the entire working of the factories. Not long since I took a friend, himself a manufacturer on the largest scale, over our factories. ... He exclaimed, "I never even imagined that factory labour could present a scene so cheerful and so pleasing." . . . But suppose that the pecuniary advantage to which I have alluded . . . is purely visionary. . . . It is said—you must have frequently heard it—that Joint Stock Companies have no conscience. Let this Company prove itself an exception to any such rule, by acting towards its factory "hands," as not forgetting that those "hands" have human hearts and immortal souls.'

"Mr. Blackmore . . . added . . . 'We have the prospect of really carrying out in practice what is so much spoken of in theory,—the raising of the social condition of the working classes, and the effecting of a happy union between the employer and the employed.' . . .

"Mr. Wilson . . . declined receiving back into his own pocket one farthing that he had laid out . . he only received it on the distinct condition that the whole sum should be expended on the erection of suitable chapel within the walls of the factory, in lies of that which he had rented hitherto without. . . .

"One more quotation from Mr. Wilson's letter "'In nine cases out of ten,' he says, 'a manufacture attending to other things instead of his factory, seem to be giving up a very high position, for in realit a less high, though it may be a more showy one. Th best that a clever and energetic man can expect fror going into "society," or from getting into Parliament is a certain amount of usefulness and happiness; bu he has already under his feet, in his factory, a mine c untold usefulness and happiness to others and t himself—difficult enough to open, no doubt, an requiring perhaps a good deal of apparently profitle digging at first, but containing veins of such richne as, when once struck, to repay ten times over an exertions it may cost to reach them. In "society and in Parliament a man has to deal with minds a much formed, as little pliable as his own; so tha without extraordinary power, it is not much that I can hope to do in the way of influencing them. in the factory he needs no such powers. His me position disposes every mind in it to form itself upo his, and the extent of his influence is bounded on

# 312 WORK UNDERTAKEN PRIOR TO 1852

by the limit he may himself choose to put to the trouble he will take to acquire it. I think manufacturers getting into Parliament, and then asking for education bills, are acting as if fathers of families were to devote themselves to parish business, and use the power thus acquired to procure the creation of a lot of additional beadles to go and manage their families for them in their absence.'...

"How reasonable will be the joy and gratitude of the Nation should such examples indeed spread largely. . . . It is, we must repeat, certain that many master-manufacturers, however wisely and benevolently disposed, could not in their own persons do for their people what the Messrs. Wilson have undertaken . . . but one thing they can do—and that no trifle. In the cost of any great establishment of this class, the addition of a chaplain can be no serious item: and indeed we are quite satisfied that the services of such a functionary would always be . . . speedily and abundantly overpaid in the increased order, decorum, and honest diligence of the workers."

<sup>&</sup>lt;sup>1</sup>This Company still (1915) employs a chaplain, and daily services are still held; but no striking adverte seems to have been made recently in the direction of Welfare Work. Doubtless the personal influence of the Manager was very great in 1852.

# APPENDIX VI

# THE DEVELOPMENT OF A WELFARE DEPARTMENT

In order to obtain an idea of the natural development of the Welfare Department in a modern factory the extensions in an individual case are outlined, from the information available. It must not be considered either completely typical or unique. It is one of the most highly developed to be found in England, and appears to rank high in the opinion of inspectors, although it is not very widely known. The reader must bear in mind the fact that the personality of the originator always moulds the scheme, and that throughout its history the character of the people who guide it is an important influence.

The lady in whose words the tale is best told is closely associated with the Company. Speaking of times prior to 1856, she says: "At busy times, when there was a rush of work, my Grandmother and her daughter used to help to nail the labels on... My Grandmother, too, is said by many of the Workpeople to have been very sympathetic with them in times of trouble or illness. She managed a Clothing Club for them, and added a bonus to the money they paid in. Then at Christmas-time she used to buy a stock of drapery, which was retailed to the members at cost price. . . . The children of the village were cared for by a School which was in charge of

<sup>&</sup>lt;sup>1</sup> Vide British Museum Catalogue, 10827, df. 11, published 1905, pp. 84-131, chap. vii.

Maria Gogman, 'a kind old body,' as I have heard her described. . . .

"In the later years [towards 1856] some of the boys employed at the Mills used to put in an hour a day at School, half of it being during the Firm's time and they were taught by Mr. Thos. Winter, whose long connection with the Counting House Staff dates from 1849. At one time, too, a night school for boys was carried on by my Grandmother's sister. . . .

"It would seem that occasional outings were arranged for the juveniles. At any rate it is mentioned, in one of my Father's letters in 1855, that 'about a score of the Infant School children are gone... for a run on the beach.'

"On Valentine's Day my Grandmother used to give each child a present of a penny and a bun.

"The School-room . . . was used also on Sunday for Services. . . .

"Services were entirely unsectarian, people of all denominations conducting them. My Father had a horror of carrying on anything connected with [the factory] on denominational lines. Herms proud to say that 'politics and religion are as free as they can be.' 1. . .

"In 1850 the . . . Reading Society was founded, with my Grandfather as President, and my Father as Vice-President. The entrance fee was one shilling, and the subscription one penny a week for members over 16, and half this for younger ones." There were 48 members and a Library of 167 volumes. They also took in some half-dozen periodicals, but the Society lived only about a year.

"Lectures were occasionally given in the School-room. . . .

"The Brass Band which was started . . . about 1 Ibid., p. 128.

1855 is deserving of some reference. The members seem to have known little or nothing about instruments at the start, and it is said 'everyone wanted to play the cornopean.'...

"There was also a Singing Class . . . of about

40 members who paid one shilling a quarter. . . .

"An occasional Pantomime and a Fair in the neighbourhood seems [sic] to have provided a lighter

form of amusement. . . .

"Cricket seems to have been played towards the close of the time [1856], and I judge that my Father took considerable interest in it. Before that one hears of the game of Camp, which seems to have been a sort of forerunner of football, though played on a less restricted ground.

"An annual tea was held for the Workpeople. . . . These Whitsuntide gatherings were continued for many years [after 1856] . . . being held in my Father's garden and adjoining meadow, until their size made them unwieldy, and it was thought best to substitute an extra day's holiday in their place.

"The Counting House Staff, too, seems to have had an annual gathering, which is still (1905) continued, 1849; Father's Diary recording in 1849: Had our usual party of Clerks. A pleasant evening, and

they all seemed to enjoy it.

"At Christmas-time the giving of pork to the Workpeople was quite an institution. Pigs were kept at — partly to consume the refuse . . . and at Christmas-time each Workman had a gift of pork varying in size according to his family; an institution which, in a different form, is still kept up. As my Father once wrote, after having been . . . to see about the distribution; 'It will be some satisfaction to know that though they have not a Christmas dinner of turkey and its accompaniments, they will get something quite as savoury.' My Grandmother's recollections went back to still earlier times, when the

distribution was made from the scullery at the Mill House. 'It is very pleasant,' (she wrote to my Father in 1876, after receiving her annual present of pork,) 'to be identified with old customs, and my thoughts go back to early days when you were Alan's age [nine years old], and Uncle was the Manager, and gave the pork (little in quantity then in comparison) from the wash-house . . . and took tea afterwards in the parlour.'

"In earlier days still the arrangements for the Christmas dinner must have been yet more patriarchal in character. James Barnes told me: 'When I first went... (in 1830) we used to get a Christmas dinner in the — mill, and we have had it in the granary, and in the coach-house. The men used to go indoors after dinner, and the women used to go

into the other room along with Mrs. ——'

"Outside interests, one supposes, were fewer then than now. . . .

"The workers were allowed flour at 2s. a stone whenever the selling price was higher than that, this arrangement having been made... on a Coronation day—probably that of Queen Victoria—but [after 1856]... it was found some weed to sell the flour again, and as the privilege became abused it had to be modified.

"Both my Father and Mother were anxious to do something to provide meals for the Workmen at reasonable rates, and the Kitchen, which was started in 1868, was carried on under her supervision. In a letter of that year she alludes to her various engagements, including two dinner parties . . . 'the very idea of which is destructive to my peace of mind,' and expresses the hope 'in a week or two to begin cooking for our Workmen, and that will be much more to my taste.' The work was not without its difficulties. Thus, in 1869, she related in a letter to her husband: Soon after 12 we went to the

Kitchen as we heard Mrs. Wilson was in dismay as the copper fire would not draw, the water would not soil, and the dumplings would not get cooked! After ome difficulty we procured some gunpowder and tleared the flue, but it was quite a worry as you may uppose. As Lucy and I were there to carve, etc., we got the dinners all ready in time, and then I gave orders for having the flue swept out before to-morrow's tooking.

"The details of the School management, both cholastic and architectural, were left largely in my

Mother's hands (1857–1871).

"As the number of girls employed at the Works increased, it became eminently desirable that there should be someone to work amongst them, as well as someone already appointed amongst the men,1 during the hours when they were not at work, and in times of illness. In 1874 Miss Kate Southall was engaged for this purpose. The work grew quickly. Four years later my Mother wrote to her husband: 'I strongly feel that Miss Southall is doing a great deal of good in a quiet way amongst the girls by showing them how willing she is to take any trouble if she can but teach them to be better women and better wives as they grow up. And I have been thinking there is an immense amount of work to be done, especially now that the girls are beginning to buy calico and flannel, and want to be taught how to make it up,'-this letter being preparatory to a request

In 1855 a gentleman was appointed "partly to look after the welfare of the workmen and their families" (p. 112). His death occurred soon after, and it is not possible to discover what arrangements were then made. The only reason which can be accertained for the appointment of either this gentleman or Miss Southall is that the number of employees had increased. Miss Southall retired from the work about twenty-seven years ago. As far as is known she had no special training. A doctor and nurse were first introduced in 1868. The staff now (1915) includes a doctor, three nurses, and some twelve others, as well as a number of servants. All except the doctor are employed full time.

for more help, which, it need hardly be said, my Father and his Partners were willing to supply. In superintending this part of the work, and that of the Sick Nurse employed to visit the families of the Workpeople, my Mother's help and counsel were

constantly drawn upon."

In 1862 about 500 of the employees were taken to the International Exhibition in London. "My Father wrote... 'A good many, I understand, were up at 2 o'clock. Our time for starting was 4.30, and within five minutes we were off, reaching London most comfortably at 9... and in quarter of an hour the twenty buses started, and in about an hour landed their passengers at the Exhibition ready for breakfast.... [At night] about seven or eight were left behind, and had to come by Mail—one I understand got to the wrong train and went to Ipswich, but with this exception there was not a hitch of any kind—and I was very thankful when we pulled up safely... at 11.20.'

"A larger and more comprehensive scheme of Pensions, started in 1899, of which one feature is that every member joining the Fund must by small weekly payments add a percentage to the Pension granted by the Directors, takes the place of the more casual plan adopted previously. The Directors felt that to enable any Workman fulfilling the necessary conditions to look forward to a pension 'as a right, and not as a matter of charity which could be given or withheld at our pleasure,' would be a means of

lessening anxicty as to the future."

## APPENDIX VII

# EXTRACTS FROM THE DIRECTORY OF THE WELFARE DEPARTMENT OF A MODERN FACTORY

To give some idea of the extent of the Welfare Department in a modern factory the "Directory" of one may be given in outline. It must be borne in mind that no two are identical in size or system. This Welfare Department was begun in 1905.

The " Director	v of the Socia	l Depar	tment'	' is as f	ollov	/S:1	
*Lady	social worker	s.'			•	5 (W	omen)
*Gymn	astic instruct	resses	•	•		3 (w	omen).
*Surge	on dentist		•			ı (m	an).
*Works	doctor		•		•	ı (m	an).
*Nurse	s .		•	•	•		omen).
*Social	Secretary an	d Edito	or of M	agazine	• .	ı (m	an).
Social Comm	ittee (every T	uesday	aftern	oon)—			
	ctors, two so	cial wo	rkers, a	and two	oth	ers.	
Works Counc	#l						
Chairman	, a Director	, eight	men	and si	x w	omen	repre-
sent.ng	various de	partme	nts;	and, i	n a	ditio	n, ten
	d three wome		being a	ı gymna	istic	ınstru	ctress
	nting twelve						
Girls' Ambul	ance (Thursd	ay even	ungs. 7	7.30)—	_		
Two won	nen doctors in	nstructi	ng two	) classes	5, 		:-
	ss (Monday,	1 uesaa	ıy, an	a wear	nesua	ty ev	emings,
7.15)-							
Two teac	ners.		/T			Wad.	
	g Class—Ele	ementar	уци	esuay	anu.	Wedi	lesuay,
7.15)-							
Two tead		/1/		Touldon		٠١	
	g-Advanced					51-	
· One teac	her (one of th	TE LMO	above	mention	icu).		

<sup>&</sup>lt;sup>1</sup> All the officers are different persons, except when the contrary is stated. Those marked \* are full-time officers. There are, in addition to these, ten teachers who are paid for the lessons they give.

```
Embroidered Clothes Class (Tuesday, 7.15)-
    One teacher.
Dressmaking Classes (Monday, Tuesday, Wednesday, Thursday,
      Friday, 7.30)-
    Three teachers. Subscription, 1s.
Cookery Classes (in the kitchen: Advanced, Tuesday and
      Wednesday; Elementary, Monday, Thursday, Friday;
    Subscription, 6d. for 24 lessons.
Association Football Club. Ground.....

Matches..... Two teams....in — Leagues.

Departmental Competition. Honorary Secretary.....
                                 Captain.....
    Subscription, 2s. 6d.
Rugby Football Club. Ground.....
    Two teams in — Leagues. Honorary Secretary.....
   Subscription, 2s. 6d.
Musical Society. General Secretary.....
 Choral Section (Tuesday, 7-9)-
   Choirmaster (the Social Secretary).
 Orchestral Band (Monday, 7.30)-
   Conductor.....
 Reed Band (Wednesday, 7.30)-
   Learners (every evening, 7.0).
   Conductor (as above).
Boys' Club. President..... and Captain-Secretary.....
   Institute..... (each week-day evening except Saturday).
     Secretary.....
 Gymnasium (Sections, Monday, Tuesday, Thursday, Friday,
     7.30-9.30). Saturday (open to all), 7.15-9.30. Secre-
     taries (two) .....
Football. Ground..... Two teams.
     Secretary . . . . .
Camp. Subscriptions for annual Camp will be taken throughout
the winter. Treasurer (Secretary of Boys' Club).
Old Boys' Section. Games Room and Classes. Secretary.
Girls' Hockey Club. Subscription, 1s. Apply Lady Social
     Worker.
Girls' Base Ball. "Any girl possessing a badge is eligible to
c join."

Girls' Gymnastic Club (Tuesday, Wednesday, two classes)—
   Instructresses as above.
Debating Society. Meetings held fortnightly on Wednesday.
     and Thursday alternately. Secretary.....
Temperance Society. First Monday in each month.
Savings Fund. Apply to foremen or forewomen.
Saturday Social for Girls and Morris Dances. 6-9 p.m.
Men's Social Club. Every night, 7-11 p.m.; Saturday, 3-11
    Subscription, 3s. quarterly. Honorary Secretary.....
  The following are the summer sports clubs:
    Cricket Club. Honorary Secretary.....
    Girls' Cricket Club.
```

Girls' Swimming Club.

Men's Swimming Club. Honorary Secretary.....

Angling Club. Honorary Secretary.....

Bowling Club. Honorary Secretary.....

Tennis Club. Honorary Secretary.....

At branch factories in other cities two more social workers and two more dentists are engaged, as well as teachers.

It may be well to point out that the superior organisation indicated by the definite arrangements with regard to officials, teams and grounds, for the men's clubs, left largely in the hands of the workers as they are, would appear to be typical. It may, however, be due in this case to the tact and skill in dealing with the men and boys displayed by the man who acts as Social Secretary.

The instructive nature of many of the facilities afforded the girls may also be considered typical. Doubtless, with six or more women social workers, this was intended by the employers. The disparity between the numbers of men and women officially connected with the social work in a factory is not often as great as in the case cited, though there would seem to be a tendency towards employing more women than men in this capacity, in spite of the fact that the work appears frequently to have been begun by engaging one man.

# APPENDIX VIII

A Few Specimens of Printed Forms in Use in Various Welfare Departments No. 1.-EMPLOYEE'S RECORD CARD.

Check No.						
Lest Reason of Leaving	Time Wage					
LeftReason						
Сате Вотп.	Dept.				t	
		-			•	
	ord	Date.	Rate.			
NameAddress	Lives with	Change of	- Time Wage	•		•

322

## No. 2 .

#### APPLICATION FOR EMPLOYMENT

1	)ate			191 .
Name (in full)				
Address Date of b				
AgeDate of bi	irth			
Single, Married, Widowed? If under 18 are you willing to at	tand Fyar	ning Class	2003	-
If under 18 are you willing to at Is your general health good?	tend Eve	ing Clas	ses [	
tt				
Have you any physical defects:	r to have	vour tee	th attend	ed to by
When necessary, are you willing the Co.'s Dentist?  Name of School attended	3 to nave	your tee	in attenu	su to by
the Co.'s Dentist I				
Name of School attended		Standard		
City ation decired ?		Dianani		
Situation desired?Have you ever been employed h	w us befo	ra ?		
If so, when, and for how long?	y us belo	10:		
Why did you leave?				
Why did you leave? Have you apy relations working	here?			
Give names and relationship				
Are your parents living?				
What is your father in busines	s ?			
Do you live at home?				
Are you willing to come a week	on trial?			
Have you a buth certificate?				
References (in addition to late I	Employer	)		
received (in addition to the	1 7	,		
Previously employed at :-		Length	Reason	Wages
1 leviously employed at.	Occupa-	cor .	·	D -
Name and Address.	tion.	there.	Leaving.	ceived.
Traine and Tradition				
•				
		1		
	į.	1	ļ l	
	1		į į	
		1	1	
*	,		t .	
Interviewed by Remarks	-		-	•
Remarks	-			
Height and Appearance		1:		
Suitable for		eaniiness		
Seen by	U.	nosen by-	Class	
Seen by Passed Dr. Engaged by Date	_Date	N.	Class	nė.
Engaged byDate	wages	NO.	De	hr

## ALL APPLICATIONS EXPIRE IN SIX MONTHS

All engagements are subject to the applicant satisfactorily passing a medical examination.

SPECIMENS OF

			Visited.	•
No. 3	REPORT ON ABSENTEES	Week ending	Cause.	
	REPORT		Days Absent.	•
-	•	Dept.	Name.	•

# No. 4

•	
ORDER FOR	. DENTIST
To (Forewoman)	
Please sign this form if the g her teeth attended to at the tun the earliest time you can spare he	girl mentioned below may have ne specified; if not, please say er.
Name	No
Date	— Hour
Signature of Forewoman	
Time left Dentist	Milder and the second s
Returned to Dept.	
Forewoman's initi	als
•	•

Note.—Similar forms are used for men.

## No. 5 (a)

# PERFECT TIME RECORD Your Time Record for quarter ending ..... has been perfect. Thank you. Herewith please find 5s. in fulfilment of our promise to you. [Name of Firm.] "If men would only see it, great men and great Institutions simply reflect natural laws. The astronomer knows that law so well that he will fix a telescope on the heavens and know that a certain body which he is looking for will be there on time, because he knows that nature will always be on time."-SHELDON. N.B.—If you succeed in earning four consecutive quarterly premiums of 5s. an additional reward of 7s. 6d. will be paid to you on producing four of these cards at the end of the year.

[This card is given only to men over twenty-one years of age.]

## No. 5 (b) [The reverse side of 5 (a)]

#### TO THE YOUNG PEOPLE WHO DO NOT KNOW AND THE OLDER ONES WHO SOMETIMES FORGET

#### ADVANTAGES OF THESE WORKS

- Constant employment. Opportunities for earning good wages all the year round.
- 2. Every effort is made to keep the place clean and tidy.
- 3. Superior lavatory accommodation.
- The only Spinning Rooms in Yorkshire which are supplied with an abundance of fresh filtered air.
- The best artificial lighting in the Kingdom. The light that is most comfortable and least harmful to the workers.
- Fresh hot Tea is distributed free throughout the Works during each afternoon.
- 7. An Institute, managed by a Committee of the workers, is provided for the comfort and convenience of the whole working force. Good Meals are supplied in the Institute at very low prices. The Matron, Assistant Matron, and Staff are always ready and anxious to render any assistance that may be required.
- 8. A growing desire and endeavour on the part of everybody (workers and management alike) to raise the tone of the place generally, by helping one another to become brighter and better men and women.
- There are always vacancies for a few careful Doffers and Sideminders. Applications for employment may be made to the Matron as follows, namely:—

Monday . 9 to 10 a.m. and 2 to 3 p.m.

Tuesday . 2 to 3 p.m.

Wednesday . 9 to 10 a.m. and 2 to 3 p.m.

Thursday ... 9 to 10 a.m.

Friday . . . 9 to 10 a.m. and 2 to 3 p.m. and 5.30 to 7 p.m.

No. 6 (a)

#### GENERAL RULES

- 1. Overalls and caps must be put on or taken off in the Cloak Room.
- 2. Clean overalls and caps must be put on each Monday morning, and must be in good repair.
- 3. Hair must be worn under the caps, and no brooches, earrings, or pins worn.
- 4. Hatpins and bags, etc., must be left in Cloak Room. These can be given into the care of the Cloak Room Attendant.
- 5. Overalls must not be worn out of work hours. When taken home to be washed, they must be put into parcel.
- 6. All girls must be ready to go into their departments when the bell sounds.
- When the dismissal bell sounds girls must leave their work at once and march out, keeping step.
- 8. When new girls are started in any department it is expected that the older ones will help to make them comfortable.

#### No. 6 (b)

#### RULES FOR GIRLS WORKING IN FILLING ROOM

- 1. Any bogie filled with jars containing jam, etc., must be pushed by two girls.
- 2. Any girl who uses her hands instead of the spoon when filling jars with mincement, will be suspended.
- 3. When filling glass jars with jam or marmalade, each jar must first be placed inside a vessel provided for the purpose.
- 4. Fillers must not put their scoops into water except when they are to be washed; when it has been washed, the scoop must always be dried.
- 5. Any girl who puts her hand beyond the guards in the mincing or mixing machines, will be suspended.
  - 6. Each scummer must keep her tissue box tidy.
- 7. All breakages must be reported at once to the Forewoman.
- $8.\ All$  breakage boxes must be emptied before leaving-off time.
- 9. At 10.20, 12.50, 3.50, and 5.45 fillers must wash the floor in front of their table. At 12 50 and 5.45 tables must be scrubbed.

## No. 6 (c)

#### RULES FOR MEN WORKING IN BOILING ROOM

- 1. Clean overalls must be put on each Monday morning.
- 2. Overalls and clogs must be put on in Cloak Room.
- 3. Caps, boots, etc., must be kept in Cloak Room and not left in the Works  $\,$
- 4. Men must be at their work when the second bell sounds.
  - 5. Men must keep themselves clean and smart.
  - 6. All utensils must be kept in their proper place.
- 7. Wooden pails are only to be used for fruit or jam, and when not in use must be filled with water. For cleaning purposes zinc pails are to be used.
- 8. Cigarettes, pipes, and tobacco must not be brought into the factory.
- 9. Each man is expected to take a bath once a week at a time fixed by Foreman.
- 10. When the last boil is taken off at 5.45, pans and floors must be washed and left clean. When the bell stunds men will fall in and march to the Cloak Room.

Now.—The cards here given [6 (a), (b), (c)] are selected from about a dozen in use in this factory. There are general cards and cards for each department, for men and for girls.

The reader might easily receive quite a wrong impression from such rules as Number 7 [6 (a)]. A visit to the factory would remove any suspicion of harsh discipline. Similarly, Number 9 [6 (b)] might suggest petty tyranny in matters of cleanliness, but as a matter of fact the workers are proud of their spotless factory. The spirit pervading the factory may be gathered from the scathing remark of a workgirl, when she heard that another factory was "preparing" for a visit from the King. "He can come here at any time," she said; "we should be ready for him."

# APPENDIX IX

# FACTORY DINING-ROOMS

# I. (a) A WINTER MONTH'S MENUS FROM A FACTORY WHERE A GREAT VARIETY WAS ACHIEVED (1913)

Wednesday, Oct. 1	,	Thursday, Oct. 2
Haricot Bean Soup Baked Cod and Prawn Sauce Salt Brisket Marmalade Pudding Semolina Stewed Prunes	d. 2 2 2 1 1 2 2	$ \begin{array}{c cccc} & & & d. \\ & & \frac{1}{2} \\ \text{Liver and Onions} & & \frac{1}{2} \\ \text{Hot Pot} & & & \text{I} \\ \text{Apple Charlotte} & & & \text{I} \\ \text{Tapioca Pudding} & & & \frac{1}{2} \\ \text{Rice} & & & & \frac{1}{2} \\ \text{Stewed Figs} & & & & \frac{1}{2} \\ \end{array} $
Friday, Oct. 3		Monday, Oct. 6
Kidney Soup Sausage and Green Peas. Cocoanut Pudding	1 2 I	Tomato Soup ½ Stewed Steak and Savoury Balls 2
Tapioca Stewed Figs Stewed Plums	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Stewed Prunes
Tuesday, Oct. 7		Wednesday, Oct. 8
Scotch Broth Boiled Mutton and Onion	I	Lentil Soup ½ Stuffed Veal
Sauce	2 I 1 1 2	Apple Tart 1 Rice Pudding
Jam Roll	I	Apple Tart I Rice Pudding $\frac{1}{2}$
Jam Roll	I	Apple Tart I Rice Pudding

Monday, Oct. 13  d. d. Steak and Kidney Pie . 2 Lemon Jelly . 1 Ground Rice Pudding . 1 Stewed Prunes . 1	Tuesday, Oct. 14  Spring Soup
Wednesday, Oct. 15         Lentil Soup	Thursday, Oct. 16   Pea Soup
Friday, Oct. 17         Brown Soup	Monday, Oct. 20  Potato Soup
Tuesday, Oct. 21  Green Pea Soup	Wednesday, Oct. 22  Kidney Soup
Thursday, Oct. 23 Tomato Soup	Friday, Oct. 24  Scotch Broth

<sup>\*</sup> Prices not given.

Tomato Soup Stewed Steak and Savoury Balls 2 Lemon Pudding	Tuesday, Oct. 28  d. Minced Steak . 2  Jam Roly-Poly . 1  Ground Rice Pudding . 1  Stewed Figs . 1  Batches and Butter . 1
Wednesday, Oct. 29 Green Pca Soup . * Braised Veal . * Savoury Potatoes . * Apple Tart * Tapioca Pudding . * Stewed Prunes . * Batches and Salmon . *	Thursday, Oct. 30  Vermicelli Soup
Friday, Oct. 31  Toad in Hole 2 Boiled Steak Pudding 2 Bread and Butter Pudding I Rice Pudding Stewed Figs r	

# I. (1) FOUR OF THE MOST NOTEWORTHY SUMMER MENUS FROM THE SAME DINING-ROOM

Thursday, June 5		Thursday, June 12	,
Roast Beef and Yorkshire Pudding Toad in Hole Blancmange and Prunes Semolina Pudding Almond Ices	d. 3 2 1 1 1 1 1 2 1 2 1 1 2 1 2 1 2 1 2 1	Lentil Soup Cold Salt Brisket! Liver and Bacon Tapioca Jellies and Cream Ices	a. 1 2 2 1 1 1 1

<sup>\*</sup> Prices not given.

Tuesday, June 17  Boiled Cod and Hall Sauce Macaroni and Tomatoes. Chocolate Mould	d, 2 I	Wednesday, June 25 Steak and Kidney Pie Cold Roast Mutton and Scotch Brawn Jellies	d. 2 2
Chocolate Mould	1 1 2	Jellies Fruit Salad Strawberries Sultana Pudding	I 1 1

Nominally, two cups of tea, coffee, or cocoa for ½d.; in practice, cups are refilled at pleasure.

# 2. CARD (REDUCED IN SIZE) AND WEEK'S MENU FROM A NORTHERN FACTORY DINING-ROOM

[In spite of the great care obviously given to the elaboration of this card, the system of book-keeping involved is needlessly expensive.]

Name									F	ТНЕ			INSTITUTE.	UTI	TE.												l	1
# # # # # # # # # # # # # # # # # # #	Name Registe	r No			•					Z,	Z Z	.0				: ;		7	able	No.	•				:			
ms		Ц	<	п	1	9	8	101	121	314	5,161	7 18 1	9202	1 22 2	3 24 2	5 26 2	7 28 2	9 30	31 32	33.34	353	637	38 39	10,41	1	達	46	<u>‡</u>
ems    1	ED1	0	-; - - -	片	-	Ľ		ᅼ	Ļ	ļ	H	H	H						P	H			-	-	ŀ	上	Ī	1
ems    1	rni.	H	上	‡	t	ļ	1	+		ļ	‡	丰	‡	÷	1	+		į.	T	$\dashv$	Н	Ħ		H	H	Н		H
Ems		m		H				H			F	H	İ		t	Ŀ	Ė	F	-	Ŀ	L	1-	Ŧ	-	╁	1	T	1-
ms	SAI.	٦	1	‡	#	1	-	+	片.		#	#	#	+	#	냐	ή	Ħ	Ц	11	計	Ħ		Fİ	 	H	H	낚
ems    The contract of the con		þ		Ļ	t	F	1.	ŀ	-	1	1	-	1-	1	1	1	Ť	1	╀	1	1	1	1	-	1	1	1	+
ems Total to Deduct from Wages	MON.	ρ		H		片	닖		Ц	H	H		H		ŀ	+	ļ	†	Ŧ	1	1	†	+	1	1	ł	İ	누
ms		1		-	_	-		-					<u> </u>				H	i-l	F	H	1	-		F	F	Ł		┼
ems	Titee	1	1	+	#	#	1	4	님	ᆸ		1	_	-			Ħ			_				-	F	-	Ŀ	1-
cms T id.	1000	1	†	+	+	‡	-	1	‡	1	†	+	<del>-</del>	1	-	1	†	İ		4	H	Ц	H	Ϊ			H	Н
ems		F		ŀ	-	-	ŀ	l	l	l	Ì	1	†	ŀ	I	1	İ	1	-	Ŧ	1		†	1	-	-	1	4
ems	WED.	Δ	1	F	t	t	t	ļ	Ļ	ŀ	†	ł	+	ļ	1	+	†	ļ	Ţ	7	ł	t	†	‡	+	+	1	+
ems 1 dd. 3 dd. 3 dd. 3 dd. 4 dd. 3 dd. 4		Ŧ		H	닏	닏	H	L	L	Ė	-	L	-	<del> </del>	Ļ	+	r	ļ	Ť	F	ŀ	ļ	+	Ť	Ŧ	╀	$\pm$	+
ems id. 1d. 2d. 3d. 4d. 1d. 7d. 7d. 7d. 7d. 7d. 7d. 7d. 7d. 7d. 7	Tum	0		H	Н						Ħ			L	-	E	Ė	-	-	F	H	L	t	1-	-	F	t	┢
ems 1d. 1d. 2d. 3d. 4d. 1d. 2d. 3d. 4d. 1d. 1d. 1d. 1d. 1d. 1d. 1d. 1d. 1d. 1	. HOR.	1	† †	+	‡	‡	+	1	+	1	†	4	+	H	Ц	片		H		H	片	Ш	H	Н		H	Н	出
igd. 2d. 3d. 4d. 4d.	Total items			<u>                                       </u>				1	1	1	1		十			1	†	1	1	1		1	+	4	-	-	+	
Total to Deduct from Wages	Rates		보			1	٦				İΤ	± dd.	十		žď.		Ť		1	Į ģ			+	I	ģ	1	╀	귷
Total to Deduct from Wages	Pence								•		一		十				H	٦					+			ı	+	
					l	1		]			1				Totz	l to	Ď	uct	from	Ĕ	Se Se		1			İ	-	4
			Į	ı		ı																				l		1

# THE --- INSTITUTE

# MENU-Week ending Friday, September 6

Monday-					
No.					d.
40. Roast Beef and Veget	adies	•	•	•	4
35. Meat and Potato Hash	ı .	•	•	•	3
19. Peas and Potatoes	•	•	•	•	I 1/2
9. Yorkshire Pudding	•	•	•	•	1
16. Ginger Pudding .	•	•	•	•	I
7. Rice Pudding .		•	•	•	1
11. Stewed Fruit and Cus	tara	•	•	•	I
Tuesday-					
41. Roast Mutton and Ve	getables				4
29. Meat and Potato Pie	•				3
18. Beans and Potatoes					11
<ol><li>Yorkshire Pudding</li></ol>					1
13. Cocoanut Pudding					1
8. Tapioca Pudding					1
11. Stewed Fruit and Cus	tard	•			1
Wednesday-					
48. Boiled Mutton, Cape	r Sauce	Dun	nnling	and	
Potatoes .	A Dauce,	, 2001.	-pime	and	ď
34. Stewed Steak, Onions	and Pot	atnes	•	•	5 3
19. Peas and Potatoes			•	•	11
9. Yorkshire Pudding	•	•	•	•	I
14. Bachelor Pudding	•	•	•	•	ī
7. Rice Pudding .		•	•	•	1
11. Stewed Fruit and Cus	tard	•	•	•	ī
•		•	•	•	•
Thursday—					
45. Steak and Kidney Pie	and Pot	atoes	•		4
32. Liver, Onions and Pot	tato <b>es</b>				3
18. Haricot Beans and Po	otaroes				13
10. Season Pudding					1
<ol><li>Yorkshire Pudding</li></ol>		•			1
15. Roll Jam Pudding					1
8. Tapioca Pudding	•				I
11. Stewed Fruit and Cus	tard	•	•		I
	7		υ		٠
Friday—					
33. Fish and Parsley Saud	e and Po	otatoes			3
40. Roast Beef and Veget	ables				4
•19. Peas and Potatoes		•			11
<ol><li>Yorkshire Pudding</li></ol>					ī
12. Baroness Pudding					I
7. Rice Pudding .					I
11. Stewed Fruit and Cus	tard				I
•					

(Not to be taken from the tables)

#### 3. FLUCTUATIONS IN THE NUMBERS OF DISHES SUPPLIED

The numbers of dishes supplied at two separate dining-rooms belonging to one firm during nine consecutive weeks, November 10, 1913, to January 9, 1914, are subjoined. They give some idea of the fluctuations which occur even when the dining-rooms are in full working sorder. The figures are as follows:—

	Dining-Room X			Din	ing-Roon	n Y
	Soup	Meat	Pudding	Soup	Meat	Pudding
Nov.	15	118	127	34	60	46
10.	31	87	95	42	62	. 88
11.	21	101	112	39	75	108
12.	9	37	31	—	3	3
13.	49	109	108	38	94	26
17.	17	115	131	19	69	75
18.	48	105	147	27	75	109
19.	s68	116	146	887	47	115
20.	47	101	129	51	92	80
21.	46	135	172	62	100	117
24.	37	106	138	32	58	90
25.	52	112	135	43	91	106
26.	34	140	147	39	981	108
27.	27	130	148	16	116	113
28.	50	146	140	37	120	117
Dec. 1. 2. 3. 4. 5.	51 51 896 65, 50	118 113 117 128 145	130 148 146 145 201	23 27 886 57 45	73 101 78 108	114 115 82 154 176
8.	65	119	* 114	46	88	94
9.	50	114	146	55	' 110	154
10.	20	144	141	58	136	124
11.	41	123	139	65	128	127
12.	42	130	161	48	97	115

s = Scotch broth, id. (double the price of other soups).

	Dining-Room X			Dining-Room Y		
	Soup	Meat	Puddinġ	Soup	Meat	Pudding
Dec. 15. 16. 17. 18. 19.	35 898 72 50 64	122 74 121 117 130	151 129 124 135 160	27 8103 56 65 46	87 80 115 98 117	98 124 129 143 139
22. 23. 24. 25. 26.	61 58 61 	118 • 106 124 —	115 128 129 —	• 38 52 56 —	81 109 102 —	109 134 126 —
29. 30. 31. Jan. 1.	•63 77 8125 67	135 128 77 133 145	100 • 135 150 142 160	57 50 ' 8115 62	87 142 93 137 122	109 134 131
5. 6. 7. 8. 9.	56 95 90 90 72	133 98 100 114 95	128 135 170 170 110	73 31 49 62 53 42	94 84 79 98 89	82 136 120 125 131

s=Scotch broth, id. (double the price of other soups).

The average number of meat dishes, of soups, and of the two together on each of the five week-days during this period was:

	M.	T.	w.	Th.	F.
Meat	198	199	207	209	239
Soup .	79	112	132	96	107
Meat and Soup .	<b>377</b>	311	339	305	346

## 340 FACTORY DINING-ROOMS

210 meat dishes per day was the average, the highest record being 282 and the lowest 40. There was thus a difference of 242 between the highest and the lowest numbers; and without other guides to the possible fluctuations the caterer would have to allow a margin of something like 35 per cent. above the average (282 instead of 210). This merely suggests the nature of the task to be undertaken. The demand for soup on any one day varied from 9 (or 36 omitting November 13, on which day there was something like a dinner strike) to 240, the average being 105. An even greater margin was therefore necessary in this case; but of course it is a comparatively simple matter to allow a margin in the provision of soup.

#### APPENDIX X

THE TREATMENT OF MINOR INJURIES (AUGUST 1915)

THE following suggestions for rendering first aid so as to prevent subsequent septic infection or blood poisoning were issued in August 1915 for official use:

#### A SCRATCH OR SLIGHT WOUND

Do not touch it.

Do not bandage or wipe it with a handkerchief or rag of any kind.

Do not wash it.

Allow the blood to dry and so close the wound naturally; then apply a sterilised dressing and bandage.

If bleeding does not stop, apply a sterilised dressing and sterilised wool, then bandage firmly.

If the wound is soiled with road dirt or other foul matter, swab freely with wool soaked in the iodine solution 1 and allow the wound to dry before applying a sterilised dressing.

#### A BURN OR SCALD

De not touch it.

Do not wash it.

Do not apply oil or grease of any kind.

Wrap, up, the injured part in a lar

Wrap up the injured part in a large dressing of sterilised wool. •.

<sup>&</sup>lt;sup>1</sup> Au alcoholic solution containing 2 per cent. of iodine.

Do not remove any dressing, but, if the injured part becomes painful and begins to throb, go to a doctor at once.

Destroy all dressings which have been opened but not used; they soon become infected with, microbes and then are not safe to use.

## EYE INJURIES

Apply the eye drops 1 to the affected eyeball by means of the camel-hair brush in the bottle.

Do not try to remove any particle which cannot be brushed away.

Tie up with a clean handkerchief or bandage.

Go to a doctor at once.

Prevention is better than cure; therefore, if your work entails danger to the eyes,

Wear Goggles.

Goggles have saved hundreds of eyes; thousands have been lost for want of them.

Note.—Danger from minor injuries arises from blood poisoning, which is caused when microbes infect a wound. The majority of wounds are at first "clean"—that is, they are not infected with microbes; such infection usually occurs later, and comes from handkerchiefs or other materials applied

<sup>1</sup> Instructions to chemist for making eye drops:

Cocain 0'5 per cent.
Hyd. Perchlor 1 in 3000,

Weigh 95 grammes of castor oil into a flask capable of holding twice the quantity. Add, 0.5 gramme of powdered cocaine. Warm on a water bath till dissolved. While the solution is still warm (but not hot) add I cubic centimetre of a solution containing 3.3 grammes of mercuric chloride in 100 cubic centimetres of absolute alcohol. Mix the solutions by rotating the flack.

About half an ounce, or 15 c.c., of this solution should be supplied in a bottle from the cork of which a camel-hair brush is pendent in the fluid.

to stop bleeding or to wipe away blood, and, in the case of eye injuries, from efforts to remove fixed particles with unclean instruments. It is better to leave a wound alone than to introduce microbes by improper treatment. The congealing of blood is Nature's way of closing wounds against infection, and should not be interfered with.

Burns and scalds when the skin is not broken will heal if left alone; all that is necessary is rest and a protective covering. When blisters form they must not be pricked, except under medical advice.

Rest is an important aid to healing. A short rest at first allows healing to commence, and often saves a long rest later. An injured hand or finger can be rested in a sling, and an injured eye by a bandage, but an injured foot or toe can only be rested in bed.

#### APPENDIX XI

# Non-Parliamentary Industrial Legislation

In the process of legislation "an important and an increasing practice" is "the delegation of legislative powers to Government Departments." "The difficulty of carrying a complicated measure of legislation through the House of Commons is responsible for the tendency to leave matters of detail to be formulated by rules made in the Department which is concerned with the administration of the statute in question or by by-laws to be framed by a local authority subject to the approval of a Department. The power of the executive necessarily grows as the intervention of the State in concerns of daily life outgrows the capacity of Parliament to discuss and determine these matters within the limits of Parliamentary time."

The extent of this growth may be judged by the fact that the "Statutory Rules and Orders of a Public and General character issued during 1913" occupy some 2400 pages (octavo) while "The Public General Acts" passed during the same period occupy only 354 pages of the same size.

Statutory Orders, which were first issued in 1867,

come into existence in various ways.

1. They may have been issued as Provisional Orders, scheduled in a Bill, and passed through all the stages necessary to convert a Bill into an Act;

<sup>&</sup>lt;sup>1</sup> Anson, Law and Custom of the Constitution, 1911, vol. i. pp. 296-7.

<sup>2</sup> Ibid., p. 300.

2. They may have been submitted to the Privy Council, and subsequently laid before both Houses for a fixed period of time;

3. They may merely have been laid before both

Houses for a certain period; or

4. They may even take effect without being submitted to the Privy Council or to Parliament at all.

"A great and perhaps increasing number" belong to the last class, and this is the usual method of procedure in connection with Statutory Orders relating to factories.

It is unnecessary here to consider Statutory Orders in general, but we may consider them in their relation to factories.<sup>3</sup> About one and a half per cent. (in bulk) of the "Statutory Rules and Orders" issued in 1913 applied to factories; and on January 1, 1914, the Factory and Workshop Orders in force covered some 220 octavo pages.<sup>3</sup> These were chiefly issued under the Factory and Workshop Act of 1901.<sup>4</sup> Under about thirty different sections of that Act, the Secretary of State may issue "Special Orders"; under two or three more, he may issue "Orders"; and, under others, he may "fix," "define," certify," "direct," "cause," and so on. The generic name of "Order" seems given to all instructions issued by the Secretary of State, though technically the bulk of them appear to be "Regulations" issued for

Misses Hutchins and Harrison give an outline of the History of Orders in Council as applied to factories in their 1911 edition, Appendix A.

Appendix A. Factory and Workshop Orders (1914 edition). Technically:

Orders •		•	•		92	pages
Certificates		•	•		13	11
Regulations		•		•	107	"
Special Rules	•	•	•	•	8	**
					220	,,

<sup>4 1</sup> Edw. vii. c. 22.

<sup>&</sup>lt;sup>1</sup> Anson, Law and Custom of the Constitution, 1911, vol. i. pp. 296-300.

the control of certain industries "certified" to be

dangerous.1

The Cotton Cloth Factories Act of 1911 empowers the Secretary of State to "make regulations," but the regulations made in accordance therewith appear as "Factory and Workshop Orders."

The terms are loosely applied, and the reason would appear to be contained in the law itself. Rules Publication Act, 1893, stipulates that statutory rules" shall be numbered, printed, and sold by the Queen's Printer of Acts of Parliament, and it defines the term "statutory rules" as meaning "rules, regulations, or bye-laws made under any Act of Parliament which (a) relate to any court in the United Kingdom, or to the procedure, practice, costs, or fees therein, or to any fees or matters applying generally throughout England, Scotland, or Ireland; or (b) are made by Her Majesty in Council, the Judicial Committee, the Treasury, the Lord Chancellor of Great Britain, or the Lord Lieutenant or the Lord Chancellor of Ireland, or a Secretary of State, the Admiralty, the Board of Trade, the Local Government Board for England or Ireland, the Chief Secretary for Ireland, or any other Government Department." 2

In the preface to the "Statutory Rules and Orders" (published by authority in 1890) we read: "It has for a long time past been customary for Parliament in passing an Act to authorise the Queen in Council or a Government Department to make Orders, Rules, or Regulations for the purpose of carrying the provisions of the Act into effect, by establishing procedure, or forms or tables of fees, or otherwise. These Orders, Rules, or Regulations (which may be referred to generally as 'Orders') are now numerous and important. They are, when duly made, tantamount to Acts of

<sup>&</sup>lt;sup>1</sup> 1 & 2 Geo. v. c. 21. \* 56 & 57 Vict. c. 66, ss. g, 4.

Parliament. . . . The Orders have not hitherto been published in a systematic manner. . . . This . . . has often made it difficult to discover when and how the statutory power of making 'Orders' has been most recently exercised. To meet this difficulty the Lord Chancellor and the Treasury have directed the publication henceforward of all 'Orders' which are of a Public and General character in an annual volume uniform with the official annual volume of the Statutes." It would appear to be because the word "Order" is omitted from the definition of "Statutory Rules" in the Act of 1893 that it is retained in the title of the volume, "Statutory Rules and Orders." 1 \*\*

As far as factories and workshops are concerned the word "Orders" or the words "Statutory Orders" seem to cover all instructions for the regulation of factories issued by the Department, except the codes of Special Rules. Though these are printed in an Appendix, for convenience of reference, it is specially remarked, "these are not statutory orders, and do not become operative in any factory or workshop until they have been established therein in accordance with the procedure laid down in the Acts of 1891 and 1895."

Special Rules were first made in connection with white lead factories. By the Factory and Workshop Act of 1883 the occupier of each white lead factory was to draw up rules for his own factory and submit them to the Chief Inspector for approval. Employees might offer objections, and a Secretary of State might make suggestions as to alternative or new rules. If the occupier failed to draw up rules for his own factory, the Secretary of State might establish for

¹ Compare also the extract from the Documentary Evidence Act, 1868 (31 & 32 Vict. c. 37, s. 2), "Prima facie evidence of any proclamation, order, or regulation... may be given," prefixed to the Factory and Workshop Orders.

that factory such rules as he deemed necessary.1 All these were termed Special Rules,<sup>2</sup> and applied to factories individually. Sometimes the same Special Rules applied to groups of factories, but they were only applicable after direct communication between the individual factory and the Home Office.

A further step was taken in the Act of 1891. If the Secretary of State certified that in his opinion any machine, or any process, or certain conditions of work were dangerous or unhealthy, the Chief Inspector might serve on the occupier a notice either proposing special rules or requiring the adoption of precautionary measures. Unless the occupier objected within twenty-one days, the rules were estab. lished. If he did object, the matter was to be submitted to arbitrators.3 The initiative thus passed from the occupier to the Home Office. Still, the individual occupier could object, and practically reach rule had to be separately accepted in each factory. Under the Consolidating Act of 1901, after due notice regulations can be made to apply to classes of factories without the necessity for individual adoption.4 But the sections of the Acts of 1891 and 1895 which permit of Special Rules are still in force, though the Special Rules are gradually being replaced by Statutory Orders. These Statutory Orders come into force immediately upon publication and are not confirmed by Parliament, though either House, by resolution, may annul

<sup>&</sup>lt;sup>1</sup> 46 & 47 Vict. c. 53, ss. 8, 9, 10. <sup>2</sup> Not "Special Orders." 6 <sup>3</sup> 54 & 55 Vict. c. 75, s. 8. The Act of 1895 (58 & 59 Vict. c. 37, s. 28) extended this by authorising the making of special rules prohibiting the employment or limiting the period of employment of all or any classes of persons in any process certified by the Secretary of State to be dangerous or unhealthy, with the proviso that any special rules relating to the employment of adult workers should be laid before Parliament for forty days before coming into operation.

<sup>4 1</sup> Edw. VII. C. 22, SS. 79 et seq.

them within a period of forty days. They thus differ from Provisional Orders, which do not come into force until confirmed by Parliament.<sup>1</sup> The confusion in the mind of a student would appear but a shadow. of the confusion in the law itself.

<sup>1</sup> Provisional Orders date from 1845, and only Orders of this type can be issued under the Workmen's Compensation Act, 1906, and the Trade Boards Act, 1909. Vide Clifford's History of Private Bill Legislation, vol. ii. p. 678.

## APPENDIX XII

# Pottery Regulation 27 °

THE Pottery Regulation 27 (1913, No. 2) is as follows: "(a) A person or persons shall be appointed who shall see to the observance, throughout the factory, of the Regulation; and whose duty it shall be to carry out systematic inspection of the working of all the Regulations in the departments for which they are individually responsible. The names of the persons so appointed shall be recorded in the register. • (b) Each person so appointed shall be a competent person fully conversant with the meaning and application of the Regulation in so far as they concern the departments for which he is responsible. shall keep in the factory a book in which he shall record any breach of the Regulations, or any failure of the apparatus (fans, etc.), needed for carrying out the provisions, that he may have observed, or that may have been brought to his notice within the preceding twenty-four hours, together with a statement of the steps then taken to remedy such defects or to prevent the recurrence of such breach. Each entry in such book shall be dated and initialled by the person appointed, who at the end of each week shall make a further entry stating that the inspection required by paragraph (a) has been carried out, and that all the defects observed or brought to his notice have been recorded in the book. Such book shall be kept in the factory for at least six months after the latest entry therein. (c) Accurate extracts, clearly

and legibly expressed, shall be made of these entries once a week, and signed by the occupier or someone whom he may appoint, and displayed during the following week in a conspicuous place in the departments to which they refer, and copies of all such extracts shall for the same time be displayed in a conspicuous place in the mess-rooms."

#### APPENDIX XIII

#### PARASITIC TRADES

"In the [Australian] Commonwealth Court of Conciliation and Arbitration, Principal Registry. In the matter of an Industrial Dispute between the Barrier Branch of the Amalgamated Miners' Association, Complainants, and the Broken Hill Proprietary

Company Limited, Respondents." 1

On Friday, March 12, 1909, the President (Mr. Justice Higgins), in delivering judgment, said: "The proper course in any inquiry such as this would seem to be to ascertain, first, the wage to be paid to the unskilled labourer, then the proper wages to be paid to those who have extra skill, on the assumption that the employers can pay whatever wages are proper; and then to hear any evidence, and consider any arguments adduced to show that the employer ought not to be asked to pay such wages. In the Harvester case, and in the Marine Cooks' case, it was admitted that the employers could pay such wages as the Court should find to be fair and reasonable, so that I had not to face the difficulty which I now have to face. First of all, is an employer who is poor to be ordered to pay as high wages as an employer who is rich? Now, without laying down a rule absolute and unconditional under all circumstances, I strongly hold the view that, unless the circumstances are very exceptional, the needy employer should, under an award, pay at the same rate as his richer

<sup>&</sup>lt;sup>1</sup> Commonwealth Arbitration Reports, vol. iii., 1909, pp. 31-4.

rival. It would not otherwise be possible to prevent the sweating of employees, the growth of parasitic enterprises, the spread of industrial unrest-unrest which it is the function of this Court to allay. If a man cannot maintain his enterprise without cutting down the wages which are proper to be paid to his employees—at all events, the wages which essential for their living—it would be better that he should abandon the enterprise. This is the view independently adopted by Mr. Justice Gordon in Adelaide, and by Mr. Justice Burnside in Western Australia. The former said, in the Brushmakers' case, 'If any particular industry cannot keep going and pay its employees at least seven shillings a day of eight hours, it must shut up.' In the Collie Miners' case, Mr. Justice Burnside refused an application of the employers to lower the minimum, and said, 'If the industry cannot pay that price, it had better stop, and let some other industry absorb the workers.' Both the other members of the Court concurred in the latter decision.

"It is not the function of this Court to foster slackness in any industry; and if A., by his alertness and enterprise and by his use of the best and most recent appliances, can make his undertaking pay on the basis of giving proper wages to his workmen, it would be most unjust to allow B., his lazy and shiftless rival, to pay his workmen lower wages. In short, the remuneration of the employee cannot be allowed to depend on the profits actually made by his individual employer. This proposition does not mean that the possible profits, or returns, of the industry as a whole are never to be taken into account in settling the wages. For instance, the fact that the industry is novel, and that those who undertake it have at first to move very warily and economically, might be favourably considered. So long as every employee gets a living wage, I can well understand that work-

men of skill might consent to work in such a case for less than their proper wages, not only to get present employment, but in order to assist an enterprise which will afford them and their comrades more opportunities for employment hereafter. For this purpose, it is advisable to make the demarcation as clear and as definite as possible between that part of wages which is due to skill, or to monopoly, or to other considerations. Unless great multitudes of people are to be irretrievably injured in themselves and in their families, unless society is to be perpetually in industrial unrest, it is necessary to keep this living wage as a thing sacrosanct, beyond the reach of bargaining. But when the skilled worker leas once been secured a living wage, he has attained nearly to a fair contractual level with the employer, and, with caution, bargaining may be allowed to operate.

"Now, in this case, if I accept Mr. Delprat's 1 figures—and there is no evidence that they are wrong —this Company cannot pay the wages of the last two years, because the mine is very near its end. The lodes are dwindling, the expenses (per ton of concentrates) are becoming greater, the ore itself is of less assay value. In addition, at present the price of metals is rather low. I have fixed the wages proper to be paid to the different classes of employees. I find that these wages which I have fixed as proper are being actually paid by nine of the principal mines in Broken Hill—in fact, by all the mines in active operation with the exception of the Proprietary Company, and of Block 10 (which is under the same influence). It is not difficult to see the danger to industrial peace involved, when workmen performing the same work, with the same skill, in the same city, are receiving different remuneration. . . . So that, when the Proprietary Company asks me to fix by my award wages lower than are proper for the in-

<sup>&</sup>lt;sup>1</sup> Of the Broken Hill Proprietary Company.

dustry as a whole, and adduces as its reason the fact that its mine is now poor, and is becoming poorer, I cannot discern either justice or expediency in the

request.

"It is quite possible that when I give my award some will attribute the stoppage of the mine to the award. 'The directors could not go on,' it may be said; 'the Arbitration Court fixed the scale of wages too high.' But if such a statement be made, it will simply be untrue. What stops the mining is he, deficiency of payable ore. But for this deficiencty the Proprietary Company would be now carrying on its mining and milling operations, paying the same wages as the other mine companies."

#### INDEX

\*ABSENTEES, Specimen record form, (App. VII), 324. Accidents, Factory legislation as Birmingham, Report (1913), on factory flooring in, 106. Conference (1909), of Welfare workers at, 270. to, 113. Blackburn, William Kenworthy Conference for discussing preof, (App. I), 280. vention of, 35. First-Aid suggestions, (App. X), Blackford, Catharine, Selection of Ambulances, in factories, 112-3, employees in America, 259. Bleaching industry, Scotch em-173. Anderson, Miss, On post-war ployers' attempt (1853), to labour conditions, 93. limit labour 111, 32 foctnote. Anti \* Sweating League, Con-"Blind-alley occupations," Boyference of, 10 footnote. labour in, 81. Applicants for work, Selection of, Bonuses, Basis needed for granting of, 243-4.
Boy-labour, In blind-alley occupa-257-9.
Application for work, Specimen form of, (App. VIII), tions, 81.
Boy Scouts, Factory organisation 323. Apprentices Act (1802), 94. of, 186. Bradford, Rev. George Stringer Pecl's attitude to, 17-18. Training of, 216.
Aprons, Need for waterproofed, Bull of, (App. I), 274. Bradford, John Rawson of, (App. I), 279.
Bradford, John Wood of, Inspirer
of Richard Oastler, 20, 21, 1350 Architecture, Factory, 110.

Arrowsmith, P. R., On employers' gain from Welfare Work, (App. 1), 273-6. Bradford, William R(h)and of, 45. Ashley, Lord, Pioneer of factory (App. I), 280. Armitage, Pioneer of legislation, 22. Bridge, Ashton, Chas. Hindley of, 12 limitation of labour, (App. 1), 280. lootnote. Brisco, N. A., On efficiency in Industry, 72. Bristol, Effect of overtime in Baines, Edward, On employees' welfare, 45. factory at, 153 footnote. Bands, A feature of factory life, Restaurants in factories at, 242. Early example of installa-193. Broken Hill Proprietary Co., tion (1815), (App. VI), 314-5. Judgment as to wages paid by, (App. XII), 350-1. Baths, in factories, 200-3. Bronzing works, Defective ven+" Compulsory in certain works, tion in, 105. Brooke, John, Pioneer of limita-tion of labour, (App. 1), In mills a century ago, 3. Belfast, Michael Sadler's Finen works at, 20 footnote. 280.

erton, Joseph, M.P., Pioneer of limitation of Brotherton, labour, (App. I), 279. Bull, Rev. George Stringer, Social reformer of Bradford, (App. I), 274. Bury, J. R. Kay of, (App. I), 280. Cadet Corps, Success of, in factories, 186. Caps, Need for women employees' use of, 131. Catering, For factory meals, 188-96, (App. IX), 332-5, 33%-40. "Checking-on," Factory system of, 133-4. Children in factories, Hours of labour of, 17, 17-18 footnote, 151, 152 footnote. Legislation for, 20, 23, 23 footnote, 24, 24 footnote, 94. 273-6. Memorial signed by Minton, Wedgwood, etc., for legislation for, 32 footnote, 44. Cleaning staff in factories, Movement for, 107. Advantage of, 108 Cleanliness in factories, Indefinite legal requirements as to, 101. Difficulties re flooring, 106. Cleanliness, Personal tests in food factories, 84. · Cloak-rooms, in factories, Supervision of, 116-9, 117 foot-Compulsory in certain works, 116 footnote. Clubs, For factory employees, 128. Bowling, 185. Chess and Draughts, 186. Girls', 184. "Money," 264 footnote. Rambling, 185-6. Recreation, 177-87. Rifle, 186. Cole, G. D. H., On "Social Betterment," 43, 43 foot-Conferences, First attempted in Cotton-Spinning Industry, Of Weifare Workers, 270. On International Labour, 25 footnote. Re safety of employees, 34.

Consolidating Act (1901), 348.

M.P., | Continuation Classes, pulsory attendance at, in Scotland, 222 footnote, 234, 238. hours Concession of attendance at, 223. Legislation needed re, 224-5. Mr. Mansbridge on, 228. Workers' attitude to, 219-20. Continuity of service, Valuable to employers, 219. Convalescent Homes, For factory employees, 174-5. Cook, Thomas, Pioneer of limita-tion of labour, (App. I), 280. Co-operative Clubs, For recreation, 177-8. Co-operative Wholesale Society,
Recreation Clubs of, 180-2. Wages rate used as standard, 146. Co-operators, Interest in education, 214. Co-partnership, Workers' fears of, 55-6.
Trade Unions and, 54-5.
Costing " of labour, A basis for wage-rates, 138-9. Cottages for employees, 210. Cotton Cloth Factories Act of 1911, (App. XI), 346. Cotton-Spinning Industry, First Conference held by, \*\* safety of employees, 34. Cricket, For factory employees, 184. Introduced in pioneer factory, 1849, (App. V), 304-5. Curricula, In factory schools, 235-8. Dale, David, Pioneer of Welfare Work, 13, 45. Provision of playing-fields by, 213. Dancing, Popularity of, among employees, 187. Associated with gymnastics, 206-7. Trades, Certified Dangerous number of, 33. Regulation of, 33 Widening of definition of, 38.

Dental Service, In factories,

Specimen order form, (App.

• **•** 176-7.

VIII), 325.

in | Education of employees-contd. Dentists, Employment of, Non-technical, 217-9. factories, 176-7. Cook of. Singing classes, 242. Dewsbury, Thomas Pioneer of limitation of labour, (App. I), 280. used Management," In Technical, 215-8. The "sandwich" system, 231. Edwards, John, & Sons, Sup-" Diffused porters of Ten Hours Bill, factories, 246. Dining-rooms in factories, Arrangements for speedy (App. I), 279. Efficiency, Standards of, deterspeedy service in, 197-9. mined by employers, 88. Attractiveness an asset, 125. N. A. Brisco on Economics of,72. Catering difficulties, 189-90. Employees, Education of, 214-42. Charges flade in, 191-2. Effect of piece-rate wages on, Compulsory in Lead Processes and in Paint Works, 142. • Holidays for, 166-7. 120 footnote. Housing of, 207-14. Investigation of grievances of, Cost of, 126. Effect on behaviour, when Records of, by Welfare Departwell appointed, 123. ment, 257, (App. VIII), 322. Effect on health, 193. Recreation for, 109, 177-188, Eighteenth-century examples, 186, 203, 212-4, 241, (App. Employees' subscriptions to, V), 304-6. Rewards tor, 168-9, 184, 245, 264. 126. Selection of, 82-93. Management of, by employers, 194. Selection of, in America, 259. Suggestions for improvements Tables and seats in, 124-5 by, 264-5. Used as Domestic Training Wages of women, 85. Schools, 125-6. Workers' share in control of, Employers, Attitude to technical 196. education, 215-6. As pioneers of progress, 11-16. See also Food. Courtesy to employees, 243-4. Discipline in factories, Effect of gymnastics on, 204. Good effects of, on standards of fitness, 83-4, 88. Indifference of, to workers' edu-Responsibility of Department for, 264. Responsibility of workers for, cation, 214. Doctors, Employment Influence of, on factory legisof. lation, 17-30, 39, 87, (App. I), 273-81. factories, 171-2. Influence of, over school educa-Domestic Economy classes, for tion, 222-3. factory girls, 126, 236-7. Dunfermline, Example of limita-Oastler's influence on, 21. Objections of, to married women tion of labour at, 155. employees, 86. Reserve as to Welfare Work, Dusty processes, Counteraction of effects of, 104-5. Dyke, Sir William Hart, On tech-48-9. Support of Ten Hours Act, 20-3, nical education, 216. (App. 1), 273-81. Welfare Work of, 30-1, (App. Education of employees, 214-42. III), 288-96, 297-300. Continuation Classes compulsoryein Scotland, 222, Factories, Adaptation of, to mo-222 footnote. dern needs, 257. Difficulties of enforcing non-Architecture of, 108-70. technical, 221. Employers' attitude to non-Cleansing of, 106-8.
"Diffused Management" in, technical, 218-21. Employers' attitu attitude 246. Draimage of, 108. technical, 215-6.

Factories—continued.
Employment of Nurses in, 113,
171.
of Doctors in 171-2
of Doctors in, 171-2. of Dentists in, 176-7.
Establishment of First-Aid in,
171-3.
of Ambulances in, 112-3.
Insurance schemes in, 247-50. Interior decorations of, 109.
Interior decorations of, 109.
Meals in, 119-27, 188-99.
Music in, 242.
Number of, under Special Rules,
37.
"Open-air" workrooms in, 104.
Records of improvement in, 29.
Rest intervals in, 162-3, 165.
Savings banks in, 263.
Seats in, 130.
Suggestions for flooring of, 106.
Workshop Leagues in, 183.
Factory, Baths and Gymnasia,
Bands, Early example of in-
stallation of, 242, (App.V1),
314-5. Bonuses, Basis needed for granting of 243-4.
Bonuses, Basis needed for
granting of, 243-4.
Chaplains, Forerunners of Wel-
fare Secretaries, 3, 60, (App.
V), 306–8.
Clubs 177-86
Clubs, 177–86. Drainage, 108.
Environment Influence on
Environment, Influence on workers, 96-8.
WOIKEIS, 90-6.
Gardens, 109, 187, 212-4.
Horner's Report (1845) on Model, (App. III), 290-3.
Model, (App. 111), 290-3.
Hygiene, Importance of raising
standard, 38.
Libraries, 240-1.
Libraries, 240-1.  Magazines, Compiled by em-
ployees, 241.
Management. Share of Works
Management, Share of Works Councils in, 246.
Nurses 112 171
Nurses, 113, 171. Schools, Advantages and dis-
advantages and dis-
advantages, 235-9. An existing model for, 231-4.
An existing model for, 231-7.
Curricula of, 235-8.
for girls, 230-7.
for girls, 236-7. Employers influence on,
228.
James Wilson, Pioneer of,
301-12.
State Grants for, 228.
Teachers in, 232-3.
Factory Law Amendment Associa-
tion, Function of, 31.
2000, 2 411042011 01, 31.

Factory Legislation, And Welfare Work, 7-8. Co-ordination of, needed. Effect of public opinion on, Employers as pioneers of, 11-16. Employers attitude to,42-51. Employers' experiments and, 31-41. Employers' influence on, 17-30, 39, 87, (App. I), 273-81. Horner's opposition to, 48. In early ninete nth century, Interpretations of, 39-40. Lord Shaftesbury on principles of, 12. Miss Martindale on, 45. Orzen's influence on, 19. Principle of, established, 31. Robert Greg's opposition to, 47-8. Twentieth-century extension of, 33.

See also Legislation.

Farr, Dr. William, On occupational mortality (1865), Fielden, John, Advocator of factory legislation, 28. Advocator of Regulation of wages, 22-3 footnote, (App. I), 278. Supporter of cause of factory children, 20-1. Supporter of Ten Hours Act, 22-3, (App. 1), 275-9.
File-cutting, Regulations as to,
87-8. Fines, Supervised by Welfare Department, 149. Fire-drill, In factories, 114. First-Aid, Appliances introduced by Tinplate Conference, 35. Establishment of, in factories. 113, 171-3.
Suggestions for rendering. (App. X), 341-3. Fish-curing industry, Good effect of short hours in, r58 foet-Five-hour spells, Workers' dislike of, 163-4. Frequent in non - textile factories, 50. Flax-scutching, Dust removal in,

104.

Flooring in factories, Difficulties | Group work, Employment of, in factories, 143-4. re, 106-7. satisfactory composition Guards, Employees' objections to. for, 106. Gymnasia in factories, 203-7, 261. Food, Danger of eating in certain workshops, 120. Control of, by Welfare Depart-Haldane, Dr. J. S., Apparatus for ment, 124-3.
Factory facilities for preparing, testing air-purity, 100. Halifax, John Edwards & Sons of. (App. I.), 279. 123-4. Factory menus, 192-3, (App. Health of employees, 76-80, IX), 332-5, 337.
• Legal aspect of gratis supply, 170-7. A province of Welfare Departments, 261-2. Effect of "mess-rooms" on, 195. Provision of, for employees, 119-27, 188-99 Specimen payment register for, (App. IX), 336. Table showing fluctuation in 120. Effect of "rest-rooms" on. 127-0 Effect of "speeding-up" on, dishes supplied, (App. IX), 338-40. 160-1. Regulations resulting from Freer-Smith, Sir Hamilton, Illuscholera outbreak, 9 foottrations of dust-removal, note. "Holiday Homes," For factory 104-5. "Funeral Clubs." Insurance by, girls, 175. Holidays, Arranged by Welfare Secretary, 262. 263. Bonuses for, 166-7. Games, 177-9, 184, (App. V), For employees, 166. 304-5 Home influences, Importance of, Gardens (round factories), 109, 187. 211. Homes of workers, Visits to, by Employees' appreciation of, Welfare Secretaries, 268. 212-4. Employers' requirements for Roof, 187. girl workers, 85. Horner, Leonard, Description of Gardner, Robert, of Manchester, Pioner in limitation of labour, 11 footnote, 21, 26, model factory, (App. III), 290-3. 280, 282-7. On "good employers," (App. Girl Guides, Factory organisation IV), 298. of, 186. On Welfare Work in Man-Glasgow, Overtime discontinued chester, (App. III), 294-6. in Munition Works at, 152. Opponent of legal limitation Effect of overtime in powderbag factory at, 153 footof labour, 48. Plans for the Welfare of the note. Work-people," 2. "Good employers," (App. IV), Pre-eminence amongst col-297-300 leagues, 2 footnote. Greg, Robert Hyde, Opponent to Report on employers' hos-tility to Ten Hours Act, factory legislation, 47-8, 280-1 (App. III), 289-90. Report on experiments in Greg, William Rathbone, Supporter of Ten Hours Act, (App. 1), 280-1. reduction of hours, 282-6. Horrocks & Jacson, Pioneers in limitation of labour, Grievances, Investigation of, 54. Griffith, Ellis, Opener of Trades (App. 11), 284-5. Hospitals, Employers' and em-Requirements Exhibition, ployees' subscriptions to, Grose, Justice, On restriction of

175-6.

children's labour, 23.

Hostels, For girl workers, 208-9. Irksome restrictions in, 209-10. Hot-plates, For factory meals, 198. Hours of Labour, in Factories, Concessions to women and girls as to, 157 footnote. Economic advantages of short, 151. Effect of Great War on, 152-4. Effect of overtime in various factories, 153 footnote. Grouping of, 162-3. Normal legal hours for women in, 50 footnote. Reduction of, attempted in Bleaching Industry, 2 foot-Reduction of, Effect on wages, 161. Reduction of, Experiments at Preston in, (App. II), 282-4. Reduction of, Robert Owen's theory of, 150. Reduction of, Successful experiments in, 158 footnote, (App. II), 282-7. Reduction of out-put by over-long, 152. Seasonal variation of, 165. The Ten Hours Movement, 17, 20-3, (App. I), 273-81, 289-90. Workers' dislike of fivehours' spell, 163-4. Housing, of employees, 207-14. As Truck, 210. Of bachelor and married employees, 210. Of girl-workers, 208-9. Urgency of, for war work, 207. Welfare Departments, super- vision of, 211-2. Howell, On cholera and sanitary progress, 9 footnote. Huddersfield, John Leech of, (App. I), 28s. Industrial fatigue, Effect on health of workers, 161-2. Monotony of work a source of, 262. Industrial Revolution, Splendours and horrors of the, 10. Inspectors, Appointment of, 27-8. Extracts from Reports of (1836-37, 1845), (App. III), 288-96.

Inspectors-continued. Influence of, on legislation, 29-30. Insurance schemes in factories, 247-50. Established as a right, not as charity, 248. Supervision of, by Welfare Department, 262-4. Inter-factory game contests, 183. International Industry, Regulation of, 25 tootnote.
Invalid appliances, Supply of, to sick employees, 176. Jam industry, Rules for girls in filling-room, (App.VI), 329. Rules for men in boiling-room, (App. VI), 329. Katathermometer, A test for factory ventilation, 99-101.
J. R., Supporter of Ten
Hours Movement, (App. I), Keighley, Employees' gardens at, 213. Kenworthy, William, Supporter of Ten Hours Movement, (App. I), 280. Labour Supply, Regulation of, 93-4. Lascelles, Viscount, Opposition to Owen, 18-19 footnote. Laundries, Legislatier re (1907), 33. Saturday holiday in, 166. Lavatories, Supervision of, factories, 114-6. factories, Dining - rooms compulsory in, 120 footnote. Baths compulsory in, 200. Cloak-rooms compulsory in, 116 footnote.

Special Rules for, (App. XI),

Lead-poisoning, Diminution of, at Potteries (1914), 64. Leech, John, Supporter of Ten Hours Movement, 280.

Leeds, Repudiation of overtime

Legislation, Bleaching and Dyeing Works Bill (1860), 24 foot-

By non-parliamentary methods,

33-4, (App. XI), 344-9.

by factory owners at, 152 footnote, 153.

347.

note.

McGregor, Prof. D. H., Suggestions as to "common schemes," 5.
Criticism of "Social Betterment," 8. Legislation-continued. 63 Coal Mines Act (1872), footnote. Consolidating Act (1901), 33. Cotton Cloth Factories Act (1911), 33, (App. XI), 346. Extension of, to Bleachers and On Welfare Work, 56-7. M'Nish, James, Opponent of factory system, (App. IV), Dyers(1853), Potters (1864), 298-9. Dressmakers and Milliners (1867), 31-2. Factories Bill (1844), 12. Magnesite composition, Satisfactory floorings of, 106. Factories under Special Rules, Manchester, Condition of cotton trade at, 24 footnote. Early Welfare Work in, (App. Fielden and Factory, 23 foot-III), 294-6. Restrictive Health regulations note. First Factory Act, 17. First Eactory Bill (1802), 23. Health and Morals of Apprenadopted at, 11. The Greg family of, (App. I), tices Act (1802), 94. Home Office Orders re Ventilation, 99. 280-I See also Robert Gardner of. Mansbridge, Albert, On compulsory Continuation Classes, Lord Shaftesbury and Factory, 238-9. 12. Peel and Factory, 17, 18. On Evening Schools, 227-8. Married Women, Employers' ob-Pottery Regulations (1913), 40. jections to their employ-Provisional Orders, 349 footment, 96. note. Regulations ve Welfare Work, Martindale, Miss, On Welfare inspection, 45, 66. 63-4 Meals in factories. See Food, Re Laundries (1907), 33. Rules Publication Act (1893), Dining-rooms. Medical attendance in factories, 346. Scottish Act re Continuation 171-3. Classes, 222 footnote. See also Ambulances, First Aid. Scottish Act re Hours of Em-Doctors, Dentists. Mess-Rooms. See Dining-rooms, ployment, 239. Sheridan and Factory, 18. Sir John Hobhouse Factory, 23 footnote. Food. Minimum Wages, Established in and certain trades, 38 footnote. Effect on organisation of Technical Instruction Bill labour, 94.
"Money Clubs," formation of, (1887), 216. Ten Hours Act, 20-3, (App. I), 264 footnote. 273-81. Monotony, Effect of, on workers, Trade Boards Act (1909), 38 97, 261-2. Shorter spells needed, 163. footnote. Workman Act Unemployed Morality of workers, Influence of (1905), 94. White Phosphorus Matches low wages on, 89. Morley, Samuel, Personal rela-Prohibition Acts (1908), tionship with employees, 25 footnote, 33. See also Factory Legislation. Leicester, Early Welfare Work in, 150. Morris Dancing, Instruction in (App. IV), 299-300. Libraries in factories, 240-1. factories, 206. Mortality, Occupational, Need for investigation as \*7, 77. Dr. William Farr's tables as Lighting, Arrangements in various factories, 105-6. Roof-lights, 105-6. to, 77. Motherhood, Effects of industry Saw-toothed roofs, #05-6. off, 77. Liverpool, Co-partnership at, \$5.

Motherhood-continued. Women-workers' instinctive protection of, 79-80.

Münsterberg, Hugo, On need of a psychology of businesslife, 90-1 footnote.

Music, in factories, 242.

National Association of Factory Occupiers, 31.

New Lanark, Dale's plans for welfare at, 2.

Low wages at, 4

Owen's connection with, 4, 19 footnote, 20.

Result of limitation of labour at, 19 footnote.

Non - technical Education. See Education of employees.

Nurses, employment of, in factories, 113, 171.

Oastler, Richard, Influence on contemporary employers,

Origin of his Ten Hours Bill, 20, (App. I), 274-6. Occupational disease, Need for

investigation into, 78. Oldham, John Fielden of, 12 footnote.

Oliver, Sir Thomas, On good effects of Welfare Work. 53 footnote. "Open air" work-rooms, 104.

Overalls, Use of, for employees, 131, 133.

Overcrowding and ventilation,

Overhead shafting, Scientists' approval of, for ventilation, 103.

Overseers, Children overworked by, 17-18.

Owen, Robert, Efforts to improve factory conditions, 3, 4, 13, .t4, 15, 18, 19, 20,445.

Suggestion as to International Regulation of Industry, 25. Theory of hours of labdur, 150-1.

Paint - Factories, Dining - rooms compulsory in, 120 footnote. Parasitic Trades, Judgment on,

by Commonwealth Arbitra-tion Court, (App. XIII), 352-5.

"Paternalism," Factory workers' objection to, 71.

Payment by piece or time, Psychological effect 141-2.

Sir Robert, Experiments Peel, in employment, 9. Factory legislation initiated

by, 17, 18. Opposition to Sheridan's Bill,

18 footnote. Pensions, A premium for continuity of service, 249.

Percival, Dr. Thomas, Pioneer of Public Health legislation, Phosphorus (White), Legislation

re, 25 footnote, 33.

Piece-work, As part basis for wages, 142-3.

Plenum system of yentilation,

Pottery Trade, Appointment of Works Inspectors in, 28.

Compulsory appointment of Welfare Secretary in, 63, 269.

Diminution of lead-poisoning in, 64

Memorial of employers (1862) re employment of children in, 52.

Regulation re lavatories in. 40-I.

Regulations as to, (App. XII), 350-1.

Trades Requirements Exhibition arranged by, 35-6. Preston, Gardner's experiments for limitation of labour at, 26, 26 footnotes 27, (App.

II), 282-7. Profit-sharing, Attitude of Trade Unions to, 54, 54 footnote,

Definition of Welfare Work not extended to, 5.

Schemes for, beyond scope of

Welfare Work, 144.

Provisional Orders, For factories,

(App. XI), 344-5. Psychology, Its place in the factory, 87-8, 90 footnote, QO-I.

Need for national recognition of, 92-3.

Punctuality, Rewards for, 168.

R(1) and, William, Pioneer of limitation of labour, (App. I), 280.

Sanitary

accommodation,

definite legal requirements

n, John, of Bradford, Pioneer of limitation of Rawson, labour, (App. I), 279. Reading Clubs, 240-1. Records of employees, By Welfare Departments, 257, 258, (App. VIII), 322.

Recreation, For employees, 177–88, 241, (App. V), 304–6.
Clubs controlled by employers, 178. By workers, 180. Co-operative Clubs, 177. Cricket, (App. V), 394. Gardens, 109, 187, 212-4. Grounds, 187 Holidays, 166. · Rambles, 185, (App. V), 305. Reading Clubs, 241. Rifle Clubs and Cadet Corps, Swimming-baths, 203. Redditch, Time-concessions to married women at, 157 footnote. Rest intervals, Controlled by local custom, 162-3. For breakfast, 165. Supervising of, by Welfare Secretaries, 169. Rest-rooms, 127-31, 174. Need for, in intermittent work, 129-30. Rewards, For employees' punctuality, 168-9. Group method of payment of, 143 footnote. Success in wise use of, 245. Unwise use of, 184. Welfare Secretary's advice as to, 264. Rifle Clubs, For employees, 186. Roof-lights, Effective use of, 105. Publication Act (1893), (App. XI), 346. Rules, Specimen printed form, (App. VIII), 322. Sadler, Michael Thomas, Efforts

foctnote, 28.

Jos.

at, 104.

213.

Salford,

as to, 101. See also Lavatories. Saturdays, Holiday in laundries, 166. Saunders, R. J., Advocator & Welfare Work, 48. On evils of wet-spinning, Organiser of factory conference (1849), 35. Report on Employers' Interest in Employees, (App. III), 288-9. Report on Welfare Work in Leicester, (App. IV), 299-300. Savings Banks, in factories, 263. Saw-toothed roofs, Principle of construction of, 105-6. "Scientific Management," ployees' dread of, 92. Need for facilities for study of, 92-3. Seats, Provision of, in factories, 130. Shaftesbury, Lord, On principles of factory legislation, 12. Sheffield, Humanitarian views of J. A. Roebuck, M.P. for, 24 footnote. Singing classes, in factories, 242. Social Betterment, G. D. H. Cole on, 43, 43 footnote. Social Secretaries, Duties of, 177-8. Special Rules for factories, 347-8.

First made for white lead factories, 347. Spells of work, 162-5.
Five-hours', disliked by employees, 163-4. Of twenty minutes in biscuit factory, 165. Reduction of output by overlong, 152. State Employment Department, • Functions of a, 94-5. Statutory Orders, Scope of, 30, (App. XI), 344-9. Stockport, Breakfast spell in factories at, 165. for Ten Hours Act, 20, 21 Brotherton of, Stoke-on-Trent, Trades Require-Pioneer of limitation of ments Exhibition at (1913), labour, 12 footnote. Saltaire, Environment of factory 30. Sweated trades, Employers' desire Park round factory (built 1853), for legislation re, 44, 44 footmote.

Tatham, Dr., On occupational mortality among women, 77. Yechnical Education of employees, 215-8. Sir William Hart Dyke on, 216. Technical Instruction Bill, 216. Temperature in factories, Legal requirement re, 101. Ten HoursAct, Employers' support of, 20-3, (App. I), 273-81. Lord Ashley's support of, 22. Opposition to, 48, (App. I), 281. Origin of, 20. "Time-studies" in factories, Dread of, by workers, 92. As basis for wage-rates, 139-Tooth-brushes, Supply of, to employees, 177. Trade Boards Act (1909), Minimum rates in four trades fixed by, 38 footnote.

'frade Unions, Conflicting opinions of, re time and piece wages, 71. Factory facilities for officials of, 265. Formation of, 141. Inactivity of, as to Education, 214. Objectsons of, to profitsharing, 54 footnote. Officials of, as spokesmen of workers' grievances, 54. Possibilities of, re factory discipline, 245 Relationship to Welfare Work. · 5<u>5</u>-6. Trades Requirements Exhibition, held (1913) at Stoke-on-Trent, 35-6.
Transit, for employees, Welfare Departments' supervision of, 208. Truck, Provision of Acts re, 194- j. Housing of employees as an insidious form of, 210.

Tyrone, County, "Sion" Flax Eactory, (App. IV), 300. Underground Workrooms, in factories, 109.

Uniforms, 131-3.

Swimming-baths, for employees,

Ventilation, in factories, 98-105. Difficulties of, 102-3. Dr. J. S. Haldane's testing apparatus, 100. Inadequacy of legal standard for, 100-1. Regulations in cotton-cloth factories for, 99. Special need for, in dusty processes, 104. Temperature tests by the katathermometer, 99, 101. Various systems of, 103. Welfare Secretary's supervision of, 102. Wages, in factories, 135-50. Effect on girls, when inadequate, 85. Graph illustrating method of fixing a sacisfactory wage, 148. Group payment of, 143-4. Methods of fixing, 137-40, 146-9. For many women, 146 footnote. Payment of, by piece and by time, 141-2. Relation of, to Welfare Work. 136. Supervision of, by Welfare Departments, 140, 145-7, 259. Walker, William, Supporter of Ten Hours Act, 21, 28, (App. I), 2736 War-Work, Effect of, on overtime, 152-4.
Webb, Mr. and Mrs. Sidney, On the Worker's Standard of Life, 14. Welfare Departments, Extracts from Directory of a modern Department, (App. VII), 319. Government recognition of, 63. Origin of, 59-60, 62-3. Scope of, 102, 140, 145-6, 149, 158-9, 169, 210-1, 230-1, 251-71. See also Welface Secrecaries. Welfare Secretaries, Appointment of, 265. Compulsory in the Potteries,

63, 269. Duties of-

Re Complaints from em-

ployees, 265.

Welfare Work-continued. Welfare Secretaries-continued. Is the business of an expert, Duties of-Re Dismissals of employees, 264. " Education of employees, 230-1, 260-1. ,, Factory Discipline of employees, 264. " Fatigue of employees, III-2. " Health of employees, 173, 261-2. " Hom Life of employees, 212. " Housing • of •mployees, 210-1. "Insurance of employees, 262-3. "Records of employees, 158-9, 211, 257-8. " Rest Intervals for employees, 169.
Promotions, "Rewards, and Fines of employees, 149, 264-5. " Selection of employees. 257-8. " The Community, 271. "Ventilation of workshops, 102. Factory chaplains forerunners of, 3, 60, (App. V), 306-7 Qualifications needed by. 65-6, 254-6. Training of, 111-2, 144-5, 255. Value of women as, 66, 254. Wage and Bonuses of employees, 140, 145-6, 260. Welfare Work, A shield for backward legislation, 50. Definition of, 5, 69. Early experiments in, 45, 60, (App. V), 301-12, (App. III), 290-6, (App. IV), 297-300. Employers as pioneers of, 57-8. Employers' difficulties as to, 4. 135-6. Employers motives in estabe lishing 59-60. Employers' rese reserve as to, 48-9. Feared dangers of, 47, 52-3, In America, 72.

68. Little known to the public, 269-70. Many schemes of, in England, 74. Must co-exist with workers' independence, 56. Prof. D. H. McGregor on, 56-7. Relationship to Trade Unionism, 53-6. Robert Saunders on, 48. Sir Thomas Oliver on results of, 53 footnote. Slow development of, in England, 72. Welfare Workers, Conferences of, 270-1. Wet-Spinning, R. J. Saunders on, 7. Wilson, James, Early Work of, (App. V), 300-James, Early Welfare Women, in factories, Beneficial influence of, as managers, Carelessness of, as to meals, -188. Concessions to, as to hours of work, 157 footnote. Danger of lifting heavy weights by, 173.
Determination of wages of by balance of economic forces, 146 footnote. Effects of insufficient wages on, 85. Employers' objection employment of married, 86. Hours of work, 150, 157 tootnote. Influence of age on quality of work, 79-80. M.P., R. Roebuck, M.P., on limitation of labour of, 24 footnote. Lagislation re Employment of, 25 footnote.
National importance health of, 78. Need for statistics of occupational mortality of, 77-Normal legal hours of work of, 50 footnote. Suitability of, as Welfare Supervisors, 66.

Women, in factories—continued.
Unsatisfactory position of, 78, 79, 81-82.
Vocational uncertainty of, 81. Wood and Walker (of Bradford), Supporters of Ten Hours Act, (App. I), 273-6.
Wood, John, Influence on Robert
Owen, 20. Friendship with Richard Oastler, 274.
Work for Ten Hours Act, 21, 28, (App. I), 273-6. Workers. See Employees. Workers' Educational Association, Albert Mansbridge, York, Conférence (1913) of Wel-Secretary of, 228, 238-9.

tion-continued. Efforts of, for literary education, 218. Works Councils, Functions of, 245-6.
Works Inspectors, Appointment of, in the Potteries, 28, 63-4. Duties of, 65. Workshop Leagues, in factories, 183. Worsted Spinner, Wood and Walker, of Bradford, (App. I), 273-6.

fare Workers at, 270.

| Workers' Educational Associa-

# LIST OF STUDIES IN ECONOMICS AND POLITICAL SCIENCE.

A Series of Monographs by Lecturers and Students connected with the London School of Economics and Political Science.

EDITED BY THE

DIRECTOR OF THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE.

- 1. The History of Local Rates in England. The substance of five lectures ven at the School in November and December 1895. By EDWIN CANNAN, M.A., L.D. 1896; second, enlarged edition, 1912; xv and 215 pp. Crown 8vo, cloth. 6d. net.

  P. S. King & Son.
- 2. Selects Documents Illustrating the History of Trade Unionism.

  "THE TAILORING TRADE. By F. W. GALTON. With a Preface by SIDNEY WEBB,
  L.B. 1896; 242 pp. Crown 8vo, cloth. 5s. P. S. King & Son.
- 3. German Social Democracy. Six lectures delivered at the School in February and March 1896. By the Hon. Bertrand Russell, B.A., late Fellow of Trinity ollege, Cambridge. With an Appendix on Social Democracy and the Woman uestion in Germany. By Alys Russell, B.A. 1896; 204 pp. Crown 8vo, cloth. P. S. King & Son.
- 4. The Referendum in Switzerland. By M. SIMON DEPLOIGE, University of ouvain. With a Letter on the Referendum in Belgium by M. J. VAN DEN HEUVER rofessor of International Law in the University of Louvain. Translated by C. P. REVELYAN, M.A., Trinity College, Cambridge, and edited with Notes, Introduction, ibliography, and Appendices, by Lilian Tomn (Mrs. Knowles), of Girton College, ambridge, Research Student at the School. 1898; x and 334 pp. Crown 8vo, cloth. 5. 6d.
- B. The Economic Policy of Colbert. By A. J. SARGENT, M.A., Senior Hulme exhibitioner, Brasenose College, Oxford; and Whately Prizeman, 1897, Trinity College, ublin. 1899; viii and 138 pp. Crown 8vo, cloth. 2s. 6d. P. S. King & Son.
- 6. Local Variations in Wages. (The Adam Smith Prize, Cambridge Iniversity, 1898.) By F. W. LAWRENCE, M.A., Fellow of Trinity College, Cambridge; viii and 50 pp., with Index and 18 Maps and Diagrams. Quarto, 11 in. by jin., cloth. 8s. 6d.
- 7. The Receipt Rell of the Exchequer for Michaelmas Term of the Thirtyrst Year of Henry II. (1185). A unique fragment transcribed and edited by the Class
  Palæography and Diplomatic, under the supervision of the Lecturer HUBERT HALL,
  '.S.A., of H.M. Public Record Office. With thirty-one Facsimile Plates in Colletye
  nd Parallel readings from the contemporary Pipe Roll. 1899; vii and 37 pp. Folio,
  5½ in. by 17½ in., in green cloth; 2 Copies left. Apply to the Director of the London
  chool of Economics.
- 8. Elements of Statistics. By ARTHUR L. BOWLEY, M.A., Sc.D., F.S.S., cobden and Adam Smith Prizeman, Cambridge; Guy Silver Medallist of the Royal statistical Society; Newmarch Lecturer, 1807-98. 500 pp., and 40 Diagrams. Demy vo, cloth. 1901; third edition, 1907; viii and 336 pp. 10s. 6d. nets. P. S. King & Son.
- 9. The Place of Compensation in Temperance Reform. By C. P. SANGER, A.A., late Fellow of Trinity College, Cambridge; Barrister-at-Law. 1901; viii and 36 pp. Crown 8vo, cloth. 2s. 6d. net. P. S. King & Son.
- 10. A History of Factory Legislation. By B. L. HUTCHINS and A. IARRISON (Mrs. Spencer), B.A., D.Sc. (Econ.), London. With a Preface by SIDNET WEBB, LL.B. 1903; new and revised edition, 1912; xvi and 298 pp. Demy 8vo loth. 6s. net.

#### THE LONDON SCHOOL OF

- 11. The Pipe Roll of the Exchequer of the See of Winchester for the Fourth Year of the Episcopate of Peter Des Roches (1207). Transcribed and edited from the original Roll in the possession of the Ecclesiastical Commissioners by the Class in Palæography and Diplomatic, under the supervision of the Lecturer, HUBERT HALL, F.S.A., of H.M. Public Record Office. With a Frontispiece giving a Facsimile of the Roll. 1903; xlviii and 100 pp. Folio, 131 in. by 81 in., green cloth. 15s. net. P. S. King & Son.
- 12. Belf-Government in Canada and How it was Achieved: The Story of Lord Durham's Report. By F. Bradshaw, B.A., D.Sc. (Fcon.), London; Senion Hulme Exhibitioner, Brasenose College, Oxford. 1903; 414 pp. Demy 8vo, cloth. 3s. 6d. net.

  P. S. King & San.
- 13. History of the Commercial and Financial Relations between England and Ireland from the Period of the Restoration. By ALLE EFFIE MURRAY (Mrs. Radice), D.Sc. (Econ.), former Student at Girton College, Cambridge; Research Student of the London School of Economics and Political Science. 1903; 486 pp. Demy 8vo. cloth. 3s. 6d. net. P. S. King & Son.
- 14. The English Peasantry and the Enclosure of Common Fields. By GILBERT SLATER, M.A., St. John's College, Cambridge; D.Sc. (Econ.), London. 1906; 337 pp. Demy 8vo, cloth. 10s. 6d. net. Constable & Co.
- 15. A History of the English Agricultural Labourer. By Dr. W. HASBACH, Professor of Economics in the University of Kiel. Translated from the Second Edition (1908), by RUTH KENYON. Introduction by SIDNEY WEBB, LL.B. 1908; xvi and P. S. King & Son. 470 pp. Demy 8vo, cloth. 7s. 6d. net.
- 16. A Colonial Autocracy: New South Wales under Governor Macquarie, 1810-1821. By Marion Phillips, B.A., Melbourne, D.Sc. (Econ.), London. 1909; xxiii and 336 pp. Demy 8vo, cloth. 10s. 6d. net. P. S. King & Son.
- 17. India and the Tariff Problem. By H. B. LEES SMITH, M.A., M.P. 1909; 120 pp. Crown 8vo, cloth. 3s. 6d. net. Constable & Co.
- 18. Practical Notes on the Management of Elections. Three Lectures delivered at the School in November, 1909, by ELLIS T. POWELL, LL.B., B.Sc. (Econ.), Fellow of the Royal Historical and Royal Economic Societies, of the Inner Temple,
- 19. The Political Development of Japan. By G. E. UYEHARA, B.A., Washington, D.Sc. (Econ.), London. xxiv and 296 pp. Demy 8vo, cloth. 1910. Constable & Co. 8s. 6d. net.
- 10. National and Local Finance. By J. Watson Grice, D.Sc. (Econ.), London. Preface by Sidney Webb, LLB. 1910, 428 pp. Demy 8vo. cloth. Demy 8vo, cloth. P. S. King & Son. 10s. d. net.
- 21. In Example of Communal Currency. Facts about the Guernsey Markethouse. By J. THEODORE HARRIS, B.A. With an Introduction by SIDNEY WEBB, LL.B. 1911; xiv and 62 pp. Crown 8vo, cloth. 1s. 6d. net; paper, 1s. net. P. S. King & Son.
- 22. Municipal Origins. History of Private Bill Legislation. By F. H. SPENCER, LL.B., D.Sc. (Econ.), London. With a Preface by Sir EDWARD CLARKE, K.C. 1911; xi and 333 pp. Demy 8vo, cloth. fos. 6d. net.
- 23. Seasonal Trades. By Various Authors. With an Introduction by Sidney Webb. Edited By Sidney Webb, LL.B., and Arnold Freeman, M.A. Constable & Co. 1912; xi and 410 pp. Demy 8vo, cloth. 75. 6d. net.
- 24. Grants in Aid. A Criticism and a Proposal. By SIDNEY WEBB, LL.B. 1; vii and 135 pp. Demy 8vo, cloth. 3. net. Longmans, Green & Co. 1911; vii and 135 po. Demy 8vo, cloth. 3s. net.
- 25. The Panama Canaf. A Study in International Law. By H. ARIAS, B.A., LL.D. 1911; xiv and 188 pp., 2 maps, bibliography. Demy 8vo, cloth. P. S. King & Son. 10s. 6d. net.
- 26. Combination among Railway Companies. By W. A. Robertson, B.A. Constable & Co. 1912; 105 pp. Demy 8vo, cloth. 1s. 6d. net; paper, 1s. net.
- 27. War and the Private Citizen: Studies in International Law. By A. Pearce Highns, M.A., LL.D. With Introductory Note by the Rt. Hon. ARTHUR COHEN, K.C. 1912; xvi and 200 pp. Demy 8vo, cloth. 5s. net. P. S. King & Son.

# ECONOMICS AND POLITICAL SCIENCE

- 28. Life in an English Yillage: An Economic and Historical Survey of the Parish of Corsley, in Wiltshire. By M. F. DAVIES. 1909; xiii and 319 pp., illustra-
- 29. English Apprenticeship and Child Labour: A History. By O. Jocelyn Dunlop, D.Sc. (Econ.), London. With a Supplementary Section on the Modern Problem of Juvenile Labour, by the Author and R. D. Denman, M.P. 1912; pp. 390, bibliography. Demy &vo. cloth. 10s. 6d. net. T. Fisher Ugwin.
- 30. Origin of Property and the Formation of the Yillage Community. By J. St. Lewinski, D. E. Sc., Brussels. 1913; xi and 71 pp. Demy 8vo. cloth. Constable & Co.
- 31. The Tendency towards Industrial Combination (in some Spheres of British Industry). By G. R. CARTER, M.A. 1913; xxiii and 391 pp. Demy 8vo, clock. 6s. net.
- 32. Tariffs at Work: An Outline of Practical Tariff Administration. HEDLEY HIGGINSON, B.Sc. (Econ.), Mitchell Student of the University of London; Cobden Prizeman and Silver Medallist. 1913; 150 pp. Crown 8vo, cloth. 2s. net.
- 33. English Taxation, 1640-1799. An Essay on Policy and Opinion. By WILLIAM KERNEDY, M.A., D.Sc. (Econ.), London; Shaw Research Student of the London School of Economics and Political Science. 1913; 200 pp. Demy 8vo, 7s. 6d. net.
- 34. Emigration from the United Kingdom to North America, 1763-1912. By STANLEY C. JOHNSON, M.A., Cambridge, D.Sc. (Econ.), London. 1913; xvi and 387 pp. Demy 8vo, cloth. 6s. net. G. Routledge & Sons.
- 35. The Financing of the Hundred Years' War, 1337-1360. By SCHUYLER Constable & Co. B. TERRY. 1913; xvi and 199 pp. Demy 8vo, cloth. 6s. net.
- 36. Kinship and Social Organisation. By W. H. R. RIVERS, M.D., F.R.S., Fellow of St. John's College, Cambridge. 1914; 96 pp. Demy 8vo, cloth. 25. 6d. net. Constable & Co.
- 87. The Nature and First Principle of Taxation. By ROBERT JONES, D.Sc. (Econ.), London. With a Preface by SIDNEY WEBB, LL.B. 1914; xvii and 299 pp. Demy 8vor cloth. 7s. 6d. net. P. S. King & Son.
- 38. The Export of Capital. By C. K. Hobson, M.A., F.S.S., Shaw Research Student of the London School of Economics and Political Science. 1814; Constable & Co. xxv and 264 pp. Demy 8vo, clash. 7s. 6d. net.
- 39. Industrial Training. By NORMAN BURRELL DEARLE, M.A., D.Sc. (Econ.), London, Fellow of All Souls College, Oxford; Shaw Research Student of the London School of Economics and Political Science. 1914; 610-pp. Demy 8vo. cloth. ros. 6d. net.
- 40. Theory of Rates and Fares. From the French of Charles Colson's "Transports et tarifs" (3rd edition, 1907), by L. R. CHRISTIE, G. LEEDHAM, and C. TRAVIS. Edited and arranged by CHARLES TRAVIS, With an Introduction by W. M. ACWORTH, M.A. 1914; viii and 195 pp. Demy 8vo, 60th. 3s. 6d. net. G. Bell & Sons Ltd.
- 41. Advertising: A Study of a Modern Business Power. By G. W. GOODALL, B.Sc. (Econ.), London. With an introduction by SIDNEY WEBB, LL.B. 1914, xviii and gr pp. Demy 8vo, cloth. 25. 6d. net; paper, 18. 6d. net. Constable & Co.
- 42. English Railways: Their Development and their Relation to the State. By EDWARD CARNEGIE CLEVELAND-STEVENS, M.A., Christ Church, Oxford; Shaw Research Student of the London School of Economics and Political Science. 1915; rvi and 325 pp. Demy 8vo, cloth. 6s. net. G. Romledge & Sons.
- Shaw Research Student of the London School.

  G. Rowledge & Sons.

  G. Rowledge & Sons.

  G. Rowledge & Sons.

  G. Rowledge & Sons.

  H. The Lands of the Scottish Kings in England.

  By MARGARET F. MOORE,

  M.A. With an Introduction by P. HUMB BROWN, M.A., I.L.D., D.D., Professor of

  Ancient Scottish History and Palæography, University of Edinburgh.

  1915: Demy 8vo,

  George Allender Unwin.

# ECONOMICS AND POLITICAL SCIENCE

- 45. The Colonisation of Australia, 1829-1849: The Wakefield Experiment in Empire Building. By RICHARD C. MILLS, LL.M., Melbourne. With an Introduction by GRAHAM WALLAS, M.A., Professor of Political Science in the University of London. 1915; Demy 8vo, cloth... 108. 6d. net. Sidgwick & Jackson.
- 45. The Philosophy of Nietzsche. By A. Wolf, M.A., D. Litt., Fellow of University College, London; Reader in Logic and Ethics in the University of London. 1915; 114 pp. Demy 8vo, cloth. 3s. 6d. no. Constable & Co.
- 46. English Public Health Administration. By B. G. SANNINGTON. With an Introduction by Graham Wallas, M.A., Professor of Political Science in the University of London. 1915; xiv and 338 pp. Demy 8vo, cloth. 7s. 6d. net. P. S. King & Son.
- 47. British Incomes and Property. By J. C. Stamp, D. Sc. (Econ.), London. 1916; xx and 538 pm. Demy 8vo, cloth. 12s. 6d. net.
- 48. Village Government in British India. By JOHN MATTHAI, D.Sc. (Econ.), London, With a Preface by SIDNEY WEBR, LLB., Professor of Public Administration in the University of London. 1915; xix and 211 pp. Demy 8vo, cloth. T. Fisher Invain Ltd.
- 49. Welfare Work. Employers' Experiments for Improving Working Conditions in Factories. By E. D. PROUD, C.B.E., B.A., Adelaide. With a Foreword by the Rt. Hon. DAVID LLOYD-GEORGE, P.C., M.P., Prime Minister. Denny 8vo. Third edition. 7s, 6d. net.

  \*\*Monographs on Sociology\*\*.
- 3. The Material Culture and Social Institutions of the Simpler Peoples. By L. T. HOBHOUSE, M.A., Martin White Professor of Sociology in the University of London, G. C. Wheeler, B.A., and M. Ginsberg, B.A. 1915; 300 pp. Demy 8vo, paper. 2s. 6d. net.
- \*\*M. Village and Town Life in China. By Tao Li Kung, B.Sc. (Econ.), London; and Liong Yew Koh, LL.B., B.Sc. (Econ.), London. Edited by L. T. Hobhouse, M.A. 1915; 153 pp. Demy 8vo, cloth. 5s. net. George Allen & Unwin.

#### Series of Bibliographies by Students of the School.

- 1. A Bibliography of Unemployment and the Unemployed. By F. ISABEL TAYLOR, B.Sc. (Econ.), London. Preface by Sidney Webb, LL.B. 1909; xix and 71 pp. Qemy 8vo, cloth. 2s. net; paper, 1s. 6d. net. P. S. King & Son.
- 2. Two Select Bibliographies of Mediæval Historical Striky. By MARGARET F. MOORE, M.A. With Preface and Appendix by Hubert Hall, F.S.A. 1912; 185 pp. Demy 8vo, cloth. 5s. net.
- S. Bibliography of Roadmaking and Roads in the United Kingdom. By DOROTHY BALLEN. An enlarged and revised edition of a similar work compiled by Mr. and Mrs. Sidney Webben 1906. 1914; xviii and 281 pp. Demy 8vo, cloth. 15x, net. P. S. King & Son.
- 4. A Select Bibliography for the Study, Sources, and Literature of English Hedisval Economic History. Edited by Hubert Hall, F.S.A. 1914: . xiii and 350 pp. Demy 8vo, cloth. 5s. net. P. S. King & Son.

#### Series of Geographical Studies.

- 1. The Religate Sheet of the One-inch Ordnance Survey. A Study in the Geography of the Surrey Hills. By ELLEN SMITH. Introduction by H. J. Mackinder, M.A., M.P. 1910; xix and 110 pp., 6 maps, 23 illustrations. Crown 8vo. cloth. 5s. net.
- 2. The Highlands of Stuth-West Streey. A Geographical Study in Sand and Clay. By E. C. MATTHEWS. 1911; viii and 124 pp., 7 maps, 8 illustrations. 8vo, cloth. 5s. net.

  A. & C. Black.
  - e Series of Comsur Maps of Critical Areas.
- 1. The Hudson-Mohawk Gap. Prepared by the Diagram Company from a map by B. B. Dickinson. 1913; I sheet 18" x 224". Scale 2e miles to I inch. 6d, net; post free, folked 7d., rolled 9d.